



MICROBLADING REFERENCE



DERMAGRAPH MICROBLADING REFERENCE

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INTRODUCT





Welcome to the DermaGraph Microblading Masterclass and thanks for choosing us for your training. Over the next 5 days you will build the foundations for a rewarding career in one of the most exciting developments in semi-permanent makeup.

I won't try to tell you that it will be easy, it's going to take study, hard work and a lot of practice to become a good microblading artist but we're here to help and give you the support you need to succeed.

Microblading is a hot topic right now, you may have heard it called micro-stroking, feather touch or eyebrow embroidery but the method of creating realistic and semi permanent hair strokes is essentially the same. It differs from conventional machine tattooing in that you are not implanting blocks of permanent colour, you are creating lines that mimic real hairs in the skin. Microblade lines, properly executed, stand up to all but the closest scrutiny, they are crisp, perfectly defined and look amazing! The fact that they fade more naturally than a deep permanent tattoo means that with a yearly top up they can carry on looking great for ever.

The technique of manual tattooing is certainly not new, in fact it's the oldest form of body art, but what has made this treatment such a revolution is the ability to manufacture micro fine needle blades and pigments that will work well in the upper layers of the skin. Many people will claim to have invented this technique but it's more of an evolution of traditional skills that takes advantage of technical advances.

If you have a beauty background, some of the concepts in areas like brow design and colour may seem familiar, but previous beauty experience is not essential as we're going to cover microblading from the ground up.

You can divide this course into roughly two areas, the theory; in which we will cover the foundations of the treatment such as safety, anatomy, colour theory, and facial morphology, then we will progress to the practical skills of microblading. You will learn how to create brows that will amaze and delight your clients. Most importantly, we will show you how to do this safely and comply with your legal responsibilities. Although we reference UK and European legislation, during the research for this manual we've seen how similar the regulation of the treatment is across the world. If licensed at all, it's usually on a state or local level so be sure to check if there are any particular requirements to allow you to operate in your area.

There's a lot to cover in just 5 days so, to maximise time spent on the course in actually learning about microblading, we've asked you to lay some groundwork by gaining your Infection Control Qualification. We would also like you to read through this training manual so that some of the concepts that we discuss will not be completely alien when we cover them in class. Don't be worried if you find some sections difficult to grasp from the text, reading in advance will give you the opportunity to fully explore them with your trainer.

Wilma Dunn

SAFETY

&

INFECTION
CONTROL



KEYWORDS

STERILE: Free from bacteria and other living organisms.

PATHOGEN: A bacteria, virus or other micro-organism that can cause disease.

CROSS CONTAMINATION: the process by which bacteria or other microorganisms are unintentionally transferred from one substance or object to another, with harmful effect.

INVASIVE PROCEDURE: involving the introduction of instruments or other objects into the body or body cavities.

SPORE: A rounded, resistant form of bacteria adopted by a bacterial cell in adverse conditions, capable of reproducing.

SHARPS: Any sharp instrument that may become contaminated with blood or body fluid such as needles or blades etc.

This area of your learning is essential for your safety and that of your clients and people that you work with. Take the time to understand and implement safe practices and the risks can be reduced to the level of any other beauty treatment.

It is the duty and responsibility of every practitioner to ensure, and prioritise the Health and Safety of themselves and that of their clients and colleagues. To avoid litigation and disruption to business, you should also ensure that you follow your local authority or municipal guidelines on safe working conditions and licensed premises. If you are working in the UK, the Chartered Institute of Environmental Health and Public Health England have published a comprehensive guidance document entitled 'Tattooing and Body Piercing Guidance Toolkit' which is available for free download from our website at www.dermagraph.co.uk.

Semi Permanent make-up (SPMU) guidelines will vary slightly from country to country and region to region. It is, never the less, essential that you implement the standards directed by the health officials in the area that you will be carrying out the treatment. The use of legislation in this area of activity is primarily to ensure that infection control arrangements are adequate and effectively implemented wherever so-called 'special treatments' are carried out. Tattooing is classified as a 'special treatment' and the vast majority of the guidelines and legislation controlling tattoos and permanent makeup will be relevant to microblading. For the purposes of regulation, microblade technicians must satisfy the same requirements as tattoo artists.

Standard Principles of Infection Control

This guidance is based upon standard principles, which are the basic level of infection control practice. Compliance with these standard principles reduces the risk of transmission of blood-borne viruses and other pathogens.

"Everyone providing treatments to clients should know about and be able to carry out these standard principles for infection prevention and control" (*National Institute for Health and Care Excellence 2012*). To that end they should have received training in:

- Hand hygiene and skin care. (See Appendix)
- Wash hands before and after an intervention with each client.
- The use of personal protective equipment (PPE).
- Sharps management and management of exposure to blood and body fluids.
- Safe handling, storage and disposal of waste materials.
- Cleaning and disinfection of the environment.

It is one of Dermagraph's prerequisites that we see a copy of your Infection Control and Prevention qualification, prior to your certificate being issued. These certificates can be obtained by doing an online course with either 'High Speed Training' <http://www.highspeedtraining.co.uk> or 'Pro Infection Control' <http://www.proinfection-control.co.uk> The online courses cost around £30 and will only take a couple of hours to complete. Maintaining your knowledge of infection control with a yearly examination is a condition of licensing in most areas and it will keep this important information up to date and fresh in your mind.

Minimising the Risk of Infection

We are working with tools that pierce the skin and in turn, expose us to body fluids. Blood, mucous membrane fluids and lymph fluids have the potential to carry pathogens and dangerous infections such as HIV and Hepatitis. It is therefore necessary that we ensure our working environments are sterile and free from microbial life.

Ensure that the working environment is sterile prior to starting a procedure and decontaminated after the completion of a treatment.

Work out a cleaning routine for your treatment area, and stick to it. Ensuring that you allow enough time in your appointment schedule so that you don't have to skip any parts of the process.

Cleaning

Cleaning is an essential prerequisite to disinfection and sterilisation. Cleaning removes the micro-organisms and any organic material on which they thrive. It is a basic necessity to maintain a

Disinfection

Antiseptics slow the growth of some bacteria and germs, whereas disinfectants are stronger and kill some bacteria and germs. It is important that you can distinguish between the two, and more importantly that you understand that these two alone are not sufficient for a safe work environment in which to apply permanent cosmetics. Other, spore-producing pathogenic microorganisms must be destroyed through the sterilisation process.

We recommend that you use a hospital grade disinfectant to decontaminate your treatment area

“ Keep Clean, Contaminated and Sterile items separate!!! ”

good level of hygiene in your working environment.

Household detergent is adequate for most routine environmental cleaning. For high-risk environmental surfaces such as treatment surfaces, a hypochlorite solution of 1000 parts per million (PPM) available chlorine or a hospital grade tuberculocidal disinfectant should be used. This solution should be made up for use on a daily basis, following the manufacturer's instructions. After twenty-four hours the solution must be discarded. The hypochlorite solution must not be transferred into a trigger spray bottle but be used directly from the container onto a disposable cloth or paper towels. Surfaces contaminated with blood should be cleaned in accordance with the guidance and manufacturers instructions on dealing with blood spillage, as a higher concentration of hypochlorite will be required.

“All chemicals should be handled and stored in accordance with the manufacturer's instructions/ COSHH guidance” (*Health and Safety Executive, 2002*). Material safety data sheets should be accessible to all staff. All chemicals used on the premises should be used and stored in an identified cool, dry and well-ventilated place (room/ cabinet) that is lockable, out of reach of visitors and members of the public and in the original containers.

after EVERY client. This process helps eliminate the number of viable microorganisms. Every working surface including your couch, floor and treatment tray should be thoroughly cleaned and disinfected before you start the next treatment.

Sterilisation

Is the process by which all bacteria, viruses, spores or pathogens are killed or removed. It is the most effective action to prevent the spread of infectious or contagious diseases. Sterilisation is achieved by subjecting the item to be sterilised to intense heat and pressure or vacuum in a device called an Autoclave or subjecting the item to bursts of UV or Gamma radiation. For the sake of cost and convenience, we often use pre-sterilised products, such as; single use disposable pens and blades. All hand tools and blades should be in a sealed in sterile packaging, these should not be opened until the arrival of your client and immediately prior to application. Should you decide to use a reusable pen, you must ensure that it has been properly cleaned and then sterilised in an autoclave. WE NEVER reuse microblading needles as it is not possible to clean them thoroughly enough without damaging them. These are single use items that should be disposed of in a sharps box, immediately after use.

Assessment of Risk.

Risk assessments are a means by which you can first identify potential risks and then put measures in place to reduce them. Regulation 3 of the Management of Health and Safety at work Regulations 1999 (*Health and Safety Executive*) requires every employer to make a suitable and sufficient assessment of:

- a) Risks to the health and safety of their employees to which they are exposed whilst they are at work; and
- b) risks to health and safety of persons not in their employment arising out of or in connection with the conduct by them of their undertaking.

Therefore the selection of protective equipment must be based on an assessment of the risk of transmission of infection between the practitioner and client. Personal protective equipment (PPE) should be available to all practitioners and staff who may be at risk whilst working in the premises.

Personal Protective Equipment (PPE)

Work Clothing

Your clothing should be clean at all times, and professional in appearance. Work clothing should be changed daily. Staff clothing should not impede good hand washing; therefore the wearing of short-sleeved tops is advocated (Department of Health, 2010b). It is worth bearing in mind that personal cleanliness is as much a part of your licensing requirements as the hygiene of your premises.

Gloves

The use of gloves has two purposes:

- To protect the hands from becoming contaminated with dirt and microorganisms.
- By changing gloves, to prevent transfer of pathogens from one client to another.

Gloves must be worn when carrying out invasive procedures, when in contact with sterile sites and non-intact skin or mucous membranes, and during all activities that have been assessed as carrying a risk of exposure to blood, body fluids, secretions or excretions, or to sharp or contaminated instruments (National Institute for Health and Care Excellence, 2012).

Hands must be washed and dried thoroughly before putting on disposable gloves.

Gloves can tear or puncture visibly during use, or leakage may occur through microscopic holes. Hands may also become contaminated as gloves are removed. Gloves therefore must not be seen as a substitute for good hand hygiene. All gloves used for direct client care must conform to current EU legislation (CE marked for single use) and should be appropriate for the task. Used gloves should be disposed of as offensive waste (see waste section).

Aprons

A disposable plastic apron must be worn when there is a risk that clothing may be exposed to blood, body fluids, secretions or excretions (with the exception of sweat or tears) (National Institute for Health and Care Excellence, 2012). Plastic aprons should be used as single-use items and changed between clients. They should be discarded and disposed of as offensive waste after use.

Eye and Face Protection

Wear eye and face protection while carrying out the treatment or cleaning up after treatment. "Eye protection and facemasks must be worn where there is a risk of blood, body fluids, secretions or excretions splashing into the eyes and face." (National Institute for Health and Care Excellence, 2012). A risk assessment of the planned procedure should be undertaken to help inform decision making (e.g. when manually cleaning equipment as part of decontamination processes).

If reusable goggles/protective glasses are used, they should be washed after each client or task using a general-purpose detergent, rinsed and stored dry. Eye protection should be compatible with any facemask used.

Face masks (such as surgical masks) should be used if there is a risk of splashing of blood/body fluid droplets into the mouth or nose. If used, masks should be changed between clients and disposed of immediately after use. They must not be carried or worn around the neck. Face masks can also be worn to prevent direct breathing onto the procedure area.

Clear face shields that sit on the chin are gaining popularity as they serve a dual purpose. They are comfortable to wear for long periods and less restrictive than mask/goggles combinations.

Management of Sharps and Exposure to Blood and Body Fluids.

All body fluids should be regarded as potentially infectious. Blood carries the highest risk of transmitting blood borne viruses such as hepatitis B, C, D and human immunodeficiency virus (HIV). Blood borne viruses may also be transmitted by other body fluids, especially if contaminated by blood (Health Protection Agency, 2009).



Only sterile single-use needles should be used for tattooing. Needles should be examined for imperfections prior to their use and discarded if any are found. Needles should be used directly from the sterile packaging. Show your client the blades in their sterile packaging to reassure them of your standards. Never be tempted to reuse a blade as they cannot be adequately cleaned after use. Dispose of them immediately after use in an approved 'sharps' container.

'SHARPS/NEEDLESTICK' INJURIES AND EXPOSURE TO BLOOD AND BODY FLUIDS

Types of injury/exposure

A blood/body fluid injury/exposure incident includes:

- Inoculation of blood by a needle or other 'sharps'.
- Contamination of broken skin with blood.
- Blood splashes to mucous membrane, e.g. eyes or mouth.
- Swallowing a person's blood, e.g. after mouth-to-mouth resuscitation.
- Contamination where the individual has an open wound, and clothes have been soaked by blood.

Sharps and Needles

- The word 'sharps' is a generic term that includes needles, scalpels etc. and any sharp instruments that may become contaminated with blood or body fluid. In tattooing, sharps include equipment such as razors, and needles.
- 'Sharps' contaminated with blood or other body fluids should be classified as hazardous waste and handled accordingly.
- All 'sharps' must be handled and disposed of safely and with extreme care. After use they should be placed immediately into yellow sharps boxes/bins with orange lids, compliant with UN 3291 and BS7320 standards. This is to reduce the risk of exposure to blood-borne viruses, for example through an accidental 'sharps' or 'needlestick' injury (National Institute for Health and Care Excellence, 2012).

HEPATITIS AND BLOOD BORNE VIRUSES (BBVs)

It is an occupational risk that transmission of infections and blood-borne viruses (BBVs), such as Hepatitis B, Hepatitis C, Hepatitis D and HIV, which can arise and which are of primary concern. Precautions to minimise the possibility of exposure to blood from an infected client or practitioner should be put in place by the adoption of safe practices and procedures. This should include immunisation against Hepatitis B.

Local authorities may insist that you provide the results of blood tests showing immunity to this disease before granting a licence.

See the following section of this manual for more information on Hepatitis.

Risks of Transmission of BBVs

Transmission of blood borne viruses (BBVs) may result from contamination of mucous membranes of the eyes or the mouth, or of broken skin, with infected blood or other infectious material. There is no evidence that BBVs can be transmitted by blood contamination of intact skin or by inhalation.

The transmission risks after a splash (mucocutaneous) exposure are lower than those after an exposure that breaks the skin (percutaneous) such as a 'sharps' injury. The risk has been estimated at 1 in a 1000 for HIV (*Health Protection Agency 2008*). There is currently no evidence on the risk of transmission for Hepatitis B virus (HBV) and hepatitis C virus (HCV) following exposure where the skin is not broken (*Health Protection Agency, 2008*).

The risk of infection following a percutaneous injury, especially deep penetrating injuries involving a hollow-bore needle or a device visibly contaminated with blood has been estimated at:

- 1 in 3 when a source patient is infected with Hepatitis B Virus and is classed as being highly infectious at the time.
- 1 in 30 when the patient is infected with Hepatitis C Virus.
- 1 in 300 when the patient is infected with HIV (*Health Protection Agency, 2008*).

Occupational Health For Blood Borne Virus Prevention Risk Assessment

Apart from the overall duty to carry out risk assessment of hazards in the workplace, the Control of Substances Hazardous to Health (COSHH). Regulations place a specific duty on employers to assess the risks from exposure to hazardous substances, including pathogens (called biological agents in COSHH), and to bring into effect the measures necessary to protect workers and others from those risks as far as is reasonably practicable.

In these circumstances the assessment of risks to health should include:

- How to prevent exposure to biological agents.
- Steps needed to achieve adequate control of exposure.
- Steps needed to avoid accidental 'needle-stick/sharps' injury.

Vaccination Requirements

It is estimated that 1 in 3 of the World's population has been infected with Hepatitis B at some stage in their lives.

Those at risk of blood/body fluid exposure through sharps or splashes, therefore, should have a full course of the Hepatitis B vaccine. It can take several weeks to show symptoms of the disease so, as well as protecting you, this prevents the disease being passed on to clients.

An accelerated course consisting of three doses at zero, one and two months (followed by a fourth dose at twelve months after the first dose for those at continued risk of exposure), and antibody titres (blood levels) should be checked one to four months after the completion of the primary course of vaccine. It is recommended that those at continued risk of infection should be offered a once only single booster, approximately five years after completion of the primary immunisation course (antibody levels do not need to be checked before or after this booster dose). (*Department of Health 2006*).

Under the Health and Safety at Work Act 1974, employers must pay for protective measures such as immunisation. This is usually provided through the company occupational health provider. In the absence of an occupational health service, the employee could be asked to arrange immunisation through their own GP.

It would be considered good practice for practitioners to keep copies of their vaccination history/antibody level results. If practitioners refuse to have Hepatitis B vaccination, it is advised the employer should consider asking the employee to sign a disclaimer form.

If the response to the hepatitis vaccine is not sufficient, the GP will need to investigate whether there is a specific reason for non-response to the vaccine. It is most important for non-responders to know their status. They may need to be protected by other measures (e.g. immunoglobulin) following a 'needlestick/ sharps' injury.

There is no vaccine against hepatitis C and human immunodeficiency virus (HIV). Robust infection control measures should be employed at all times to minimise the risk of exposure to these viruses.

If a practitioner is found to be positive for a blood borne virus disease, they should be assessed and advised by their GP in relation to working practices.

For further information on Hepatitis and Blood Borne Viruses, please see the following section.

Waste Management Legislation

To prevent harm to waste management workers and the general public, most countries have regulations concerning the handling and disposal of potentially harmful waste. In 2012, The UK Department of Health published the “Safe Management of Healthcare waste” to replace the 2006 version and to enable waste legislation in the UK to be in line with Europe (*Department of Health, 2012*). The document is to be used as a best practice guide for the safe and effective handling of waste. The previous clinical waste classification system using groups A to E can no longer be used, as the groups do not reflect the appropriate segregation for transport or disposal.

There are a few municipal non-healthcare waste streams that are classed to be similar in nature to healthcare waste and are hence included within the Department of Health’s waste guidance’s assessment framework. Waste such as ‘sharps’ and related wastes from tattoo and body piercing practice is specifically included in this definition (*Department of Health 2012*).

Soft waste from body-piercing or tattooing practice can normally be assumed to present no risk of infection, unless an indication to the contrary is provided by a healthcare professional (*Department of Health 2012*). However, as waste contaminated with non-infectious body fluids is capable of causing offence, it would be classed as ‘offensive’ waste (see below) and would require appropriate packaging to indicate the bag contents (*Department of Health 2012*). Sharps waste would always be considered hazardous waste and should be disposed of accordingly (see below) (*Department of Health 2012*).

Offensive Waste

The guidance from the Department of Health (*Department of Health 2012*) states that “used gloves and aprons, swabs, small dressings, and cotton wool contaminated with body fluids arising from cosmetic piercing and other body art plus other special treatment procedures would be considered as offensive/hygiene waste where it is generated in quantity (one bag of 7 kg or more in any collection interval)”.

Offensive waste should be placed into a yellow/black bag (“tiger bag”) for disposal so that subsequent holders of the waste can handle and dispose of the material appropriately. Never fill an offensive waste sack more than 3/4 full, seal it securely and if it gets ripped or punctured, put it inside another bag immediately.

Only where such waste “is generated in small quantities (less than 7 kg in one bag in any collection period) should it be disposed in the black-bag (general waste) stream” (*Department of Health 2012*).

- ‘Sharps’ should always be handled and disposed of as hazardous waste. In England and Wales, ‘sharps’ not contaminated with medicinal products (such as those generated at a body piercing/tattooing premises), should be disposed of in a standards compliant yellow ‘sharps’ bin with an orange lid (*Department of Health, 2012*).
- All other non-contaminated waste such as paper should be placed in black bags, or bags for recycling, within a foot operated pedal bin and disposed of as normal household waste. Aerosols, batteries and broken glass should not be placed in these bags.

Preventing Cross-Contamination

By understanding how biohazard waste contaminates, we can effectively take measures to control and minimize the risk of cross contamination.



1. Clean procedures are those beauty techniques where you are working with skin and mucous membrane that are intact. There are tools that we would use in microblading which would not pose any risk factor to the next client because the skin is intact and therefore there is no exposure to a biohazard waste (i.e., a disposable alcohol wipe to prep the skin and eyebrow) an eyebrow pencil or a Dermagraph disposable ruler would pose no threat or risk.

2. Contaminated procedures are techniques where there is potential exposure to blood or body fluids. Once the eyebrow area has had the initial scratch for the first hair stroke, we are then working on a site that can potentially create biohazard waste. We should ensure that we have properly prepared our room prior to that initial break of the epidermal layer. It is essential that we have a sharps container to dispose of our needles and blades.

Sharps Containers come in a variety of shapes and sizes but they are all puncture proof with protection for accidental spillage of the contents.

Consideration of Storage and Opening of Sterile Items

Due diligence should be exhibited when opening or storing sterile items. Damp or wet areas should be avoided. A metal hazchem cupboard, if available, would be an ideal place to store sterile items. Consideration should also be given to where you open the sterile item to ensure that you do not break the sterile field and cause contamination.

Contamination Breach !

If your clean technique is cross contaminated, resolve it at your earliest opportunity. This will often result in changing one or more items. If you are unsure or have any doubt, discard the item and deem it contaminated.

Monitoring and Maintaining Contamination Prevention

Plan your room and daily self evaluate your practices to modify and remedy any re offending are-

“ Risk assessment is a careful examination of which work activities could cause harm, guiding decisions about precautions that need to be taken. ”

They are usually yellow or red in colour with clear labelling to show the biohazardous nature of their contents. They are available from many online suppliers or from your local chemist or pharmacy. We should also have prepared treatment area with a biohazard labeled waste bag. These are normally yellow in colour.

You should ensure that you have identified a local reputable biohazard collection company. Your local council, who have licensed your premises, will help you identify an appropriately qualified local company or contact the Environment Agency.

Sterile - You should have a sterile working area. Clean technique should always be your mode of operation. This should apply even when you have pierced the skin. It should be noted that once the skin is broken the area is not sterile. However, all of your application materials within your working area should be regarded as disposable once your treatment begins..

Contaminated items must be prevented from touching clean or sterile items. Clean and Sterile items should be stored away from your contaminated working area.

as of cross contamination. This will assist you to plan and strategise a plan to remedy future occurrences.

A risk assessment is the key step in protecting workers and the public, as well as complying with the law. The risk assessment is a careful examination of what work activities could cause harm to people and this then guides decisions about precautions that need to be taken, including infection prevention and control measures.

The Health and Safety Executive provides detailed advice on carrying out risk assessments on their website www.hse.gov.uk/risk including interactive tools.

The Management of Health and Safety at work Regulations 1999 requires all employers and self employed persons to:

- Undertake a risk assessment of their activities;

- Remove, where possible, that risk or; where residual risk is unavoidable, to provide control measures to reduce it as far as possible, including as a last resort, provision of personal protective equipment;
- Provide training to staff and persons they use to undertake their business activities (contractors) to ensure they understand the risks and the control measures.

Preparing a risk assessment is a common sense procedure that encourages you to think about the possible dangers and consider ways to remove or reduce them.

- Decide who might be harmed and how – which employees and others may be exposed to BBVs and how this might happen, for example through dealing with accidents or handling contaminated items for cleaning or disposal;
- Assess how likely it is that your procedures could cause ill health and decide if existing precautions are adequate or whether more should be done. Factors to consider include: the frequency and scale of contact with blood or other body fluids and the quality of control measures you've used.
- Record your findings, review your risk assessment and revise it, if necessary.

Sterilising Your Own Tools vs Single Use Sterile Disposables.

Firstly we need to reinforce that blades are single-use and must be disposed of after every treatment. There are no cleaners or sterilisers that can sterilise the tiny needles reliably enough to allow them to be used again with confidence.

With other tools such as the blade handles (pens) you have a choice of whether to clean, sterilise and re-use or only use sterile disposables.

If you choose to clean and sterilise your own tools you will need a professional vacuum autoclave machine and an ultrasonic cleaning bath. Pressure only style sterilisers are not suitable for microblading pens as they can only sterilise solid, unwrapped metal tools. Microblading tools have cavities that can harbour microbes so, to ensure they are properly sterilised, they will need to be processed in the more expensive vacuum type machine. These machines will sterilise solid and hollow implements that are either wrapped or not. They will also carry out their sterilising programme automatically and provide a printout or electronic log of the process for your records.

It seems wasteful to throw away tools but you will need to be doing a lot of treatments to justify the cost of the equipment needed to properly and conveniently make them safe to use again. You will also need to keep records and ensure that your autoclave is maintained. Ensure that you follow the machine manufacturers instructions in selecting an appropriate sterilisation programme for the items that you are processing.

Identifying Contraindications to the Treatment

The safety of your client may depend upon your identification of any conditions that would make the treatment inadvisable (contra-indications). You should always carry out a client consultation with a primary objective being the identification of contra-indications and the discovery of any reactions (contra-actions) to the treatment. Your client should complete a medical questionnaire to alert you to any health conditions that may cause problems.

The subject of client consultation is covered in depth later in this manual, along with a model health questionnaire and guidance on the answers in the appendix.

Control of Substances Hazardous to Health Regulations

The Control of Substances Hazardous to Health Regulations 2002 requires that a specific risk assessment is carried out by employers or self employed persons who work with substances hazardous to health. Substances which are hazardous to health include biological agents. The hazardous substances (biological agents) in this context are the BBVs or organisms which can cause communicable diseases which could be transmitted from person to person by unhygienic practices. Cleaning fluids and solvents should also be stored and used safely and in accordance with the manufacturers guidelines.

- A specific risk assessment in respect of infection control is necessary for all persons undertaking tattooing and skin piercing activities.
- Businesses employing less than 5 people do not have to record the findings of this risk assessment, however they still have to satisfy regulatory officers that their risk assessment is suitable and sufficient. The courts may accept that where a practitioner can demonstrate that they are operating in accordance with these National Guidelines, then their assessment is sufficient.
- Identify the hazards – where BBVs may be present;

Keeping Health Records

It is also a statutory requirement to keep health records in relation to work involving risk of exposure to BBVs under COSHH regulation 11(3). This health record can take the form of an incident book that records the details of any exposure to potential BBV carrying materials along with the outcome of any such exposure. The regulation states that you must keep this record for a minimum of 40 years.

Health records are not medically confidential documents. They provide feedback to management on the results of health surveillance, both for the purpose of safely deploying each employee and allowing collective analysis of the overall effectiveness of immunisation for staff at risk. Health records also allow for outcome analysis of ill health from BBV exposure to be done at a later stage (should this prove necessary), as required under regulation 5 of the Management of Health and Safety at Work Regulations.

You should keep records of the treatments that you perform on your clients. This should include the materials used along with any contra-indications or contra-actions to the treatment. We recommend that this is done in the form of client record cards. Licensing authorities require that they are kept for between 2 and 10 years.

According to the Reporting of Injuries Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR) If any exposure leads to illness or medical treatment you additionally have a responsibility to report the incident to the Health and Safety Executive on 0345 300 9923 or via their online forms at hse.gov.uk.

SUMMARY OF HEALTH & SAFETY PRACTICES

We've discussed your professional and legal responsibilities as a practitioner of an invasive treatment. The clear point that comes up repeatedly is that you should assess the risk of the procedure as it applies to your own environment and circumstances. You must think of any parts of the procedure that may cause harm and put in place measures to reduce or eliminate that danger.

Here are some key points to consider when devising control measures for the risks that you identify.

Prepare a separate procedure area with washable surfaces that is cleaned after every treatment.

Keep Sterile, Clean and Contaminated items separate.

Be aware that your treatment area is contaminated as soon as the skin is broken.

Use disposable, single use materials.

Dispose of 'sharps' and 'offensive waste' immediately after treatment, following safety guidelines.

Treat all blood and body fluids as if it were infected.

Vaccinate yourself against Hepatitis B and test for immunity.

If you sterilise your own tools, ensure that you follow correct procedure.

Store sterile items properly, only open them as you need them in your clean area.

Keep yourself and your environment clean.

Wear disposable gloves, apron, face and hair protection.

Have a documented safety procedure, review it regularly and revise if necessary.

Carry out an exhaustive client consultation with health questionnaire to identify contra-indications and a patch test to expose contra-actions.

HEPATITIS & BBVs



KEYWORDS

HEPATITIS: Hepatitis is a medical condition defined by the inflammation of the liver and characterised by the presence of inflammatory cells in the tissue of the organ. Different variants of the virus exist with differing characteristics ranging from acute (self limiting) conditions through to chronic life-threatening conditions.

ASEPSIS: The absence of bacteria, viruses and other micro organisms.

MRSA: An antibiotic resistant bacterial infection that can develop into a serious condition.

BBV: Blood Borne Virus - any virus that can be transmitted by contact with infected blood.

INTRODUCTION

Hepatitis is a major health concern throughout the world. Any person who provides a service to the public that can expose bloodborne pathogens is required to know about Hepatitis, how the different forms are contracted, and how to prevent its transmission. Hepatitis C is a damaging and debilitating disease which is, in many cases, incurable. It's the primary condition leading to liver transplants and will be the cause of death in half of the people that contract it. This is serious business.

Our lives would be simpler in the permanent cosmetic profession if our clients always knew their health status and passed along that information to their technician. This is not the case. It is suspected that some people do not disclose their health

In the previous chapter we mentioned the Infection Control & Prevention certificate that is achieved via an online course.

This is an annual qualification to remind you of basic procedures that are expected in this industry.

“ No technician should be working without a Hepatitis B vaccination, but that should not present a false sense of security. Procedures to prevent the transmission of bloodborne pathogens must be part of your routine. ”

conditions for fear that they may be considered ineligible for permanent cosmetic treatments. Others may have serious medical conditions that they are unaware of. Hepatitis infection can show only mild symptoms for years before diagnosis.

As a result, all clients should be treated the same, as if they have a medical condition you can contract or pass along to others through cross-contamination. Over the span of a career a permanent cosmetic technician will have thousands of clients, each with the potential of transmitting undesirable and health affecting conditions if proper safety precautions are not adhered to.

It is the responsibility of each technician to be knowledgeable about Hepatitis in particular, due to the increasing number of the population that carry this virus, and its potentially fatal effects.

HEPATITIS A (HAV)

Hepatitis A is inflammation of the liver caused by the Hepatitis A virus.

When symptoms occur, they may include:

- Jaundice (condition causing yellow eyes and skin, dark urine)
- Abdominal pain
- Loss of appetite
- Nausea
- Fever
- Diarrhoea
- Fatigue.

Hepatitis A is found in contaminated water and food, mainly shellfish. It is transmitted via the fecal-oral route and is found worldwide. The incubation period is 3-5 weeks. There is no chronic form of this disease, the infected person can spread the virus up to two weeks prior to them exhibiting symptom and one week after jaundice appears. People with no symptoms can also spread the virus.

HEPATITIS B (HBV)

The Hepatitis B virus was the first of the Hepatitis viruses to be diagnosed and described. It has a long incubation period from 6 weeks to 6 months. In some cases, it can be harboured for up to 15 years prior to showing symptoms. Usually manifesting as an acute (self limiting) condition it can also become a chronic (persistent) disease. Chronic conditions can lead to liver cirrhosis, liver cancer and Hepatitis D.

Historically, hepatitis B has been a serious occupationally acquired infection among healthcare workers who have frequent exposure to blood and bodily fluids. Blood to blood transmission is the prevalent form of infection but transmission is also possible by means of environmental surfaces, known as indirect transfer. This means that the permanent cosmetic technician can contract HBV

It is estimated that 400 million people worldwide are currently infected with HBV.

Since the introduction of the HBV vaccination in 1984, recorded cases in the western world have dropped significantly while cases in the developing world have reach epidemic proportions. Almost one million people died last year from conditions associated with HBV which is all the more astonishing considering that the disease is both preventable and curable.

HEPATITIS C (HCV)

This is the most serious of the Hepatitis viruses as there is no vaccine and no certainty of cure. A person can be infected with HCV for up to 30 years with only mild symptoms. It is difficult to detect without a specific HCV blood test and severe liver and gastro intestinal damage can have already occurred by the time the virus is detected. Hepatitis C transmission is usually by direct exposure to blood and can be contracted by injecting drug users, persons with occupational exposure to blood and haemodialysis patients. Some health professionals have suggested that the current rise in diagnosed cases can be traced back to inadequate hygiene practices in tattoo parlours during the 1980's

“ 1 in 3 of the World's population have been infected with the Hepatitis B virus at some time in their lives. ”

Blumberg Institute - Hepatitis B Foundation

from a contaminated desk or from contaminated gloves. Indeed, there was an instance in the USA where a US surgeon infected 19 patients with Hepatitis B, even though investigators revealed he appeared to be following universal safety precautions.

Every semi-permanent makeup artist should commit to a series of Hepatitis B vaccinations for their personal and clients protection. The EU recommend the following time scales;

- 1st vaccination
- 2nd vaccination One month after 1st vaccination
- 3rd vaccination Two months after 1st vaccination
- 4th vaccination 12 months after 1st vaccination
- Booster at 5 years after 1st vaccination.

Hepatitis C is the most common reason for liver transplants, and although in most it presents as a relatively mild condition, it is much more likely to lead to chronic liver disease. It can present without symptoms whilst slowly destroying the liver, and can be difficult to detect.

Hepatitis C is the most common infectious cause of death – exceeding HIV, hepatitis B and tuberculosis combined – HCV-related mortality is likely to be underestimated. (Centre for Disease Control, 2015)

As there is no vaccine for Hepatitis C and there is no way that you can easily check if your client is carrying the virus, a rigorous infection control policy in your workspace is all the more critical. If your client is being treated for HCV, you must obtain written permission from her Doctor or Specialist, as prescribed medications could react with some of the compounds in the pigment.

HEPATITIS D (HDV)

Hepatitis D infections only occur in those individuals who have acute or chronic hepatitis B infection and it is a potentially serious disease. Most cases appear in individuals who are exposed to blood.

The most effective protection against contracting Hepatitis D will occur through immunisation against Hepatitis B.

HEPATITIS E (HEV)

The Hepatitis E causes acute infections. It is transmitted via the fecal-oral route, by the same modes that have been described for Hepatitis A.

Large outbreaks have been described in India, Mexico and North Africa where the source of infection is usually contaminated drinking water supplies.

HIV and AIDS (BBV)

AIDS (Acquired Immunodeficiency Syndrome) is caused by the Human Immunodeficiency Virus (HIV). Many people that have contracted HIV are totally unaware that they have been infected with the virus and could pass it on to others. Some may know that they are infected but not declare this information due to the social stigma that exists around being HIV-positive.

HIV is spread by contact with infected blood, body fluids, shared needles or most commonly by sexual contact. Transmission through sharps injuries are rare, but not unknown. Infection control procedures do not prohibit treatment but, if HIV has been diagnosed, you must get written permission from your client's health professional as prescribed medication may interact with pigments used in microblading.

The virus attacks the immune system, and weakens your ability to fight infections and disease.

There is no cure for HIV, but there are treatments to help prevent the infection developing into a more serious condition. AIDS is the final stage of HIV infection, when your body can no longer fight life-threatening infections. With early diagnosis and effective treatment, most people with HIV will not go on to develop AIDS.

A damaged immune system is unable to protect the body against certain specific 'opportunistic' infections and tumours.

These infections and tumours are called opportunistic because they are caused by organisms normally controlled by the immune system, but that 'take the opportunity' to cause disease when the immune system has been damaged.

Methicillin-Resistant Staphylococcus Aureus (MRSA)

Staphylococcus is bacteria that is commonly found on the skin or in the nostrils and throat. It can become complicated by causing infection which is resistant to common antibiotics. MRSA skin infection complications can present in the following forms:

- Cellulitis- Inflammation of the skin
- Impetigo- Blister lesions to the skin
- Folliculitis- Infected hair follicle
- Furunculosis- Infection below the hair follicle
- Carbuncle- Multiple hair follicle infected.
- Abscess- pus filled mass below the skin
- Infected Cut- A lesion that has become infected

Some other forms of drugs can be used to treat infections caused by MRSA but infections that would normally be easily treated with antibiotics can go on to become serious conditions. MRSA infections are becoming a source of concern for health departments as, once they are introduced through a break in the skin, they can go on to cause potentially life threatening conditions such as; Sepsis (blood-poisoning) or Endocarditis.

Blood Borne Bacterial Infections.

The dangers of blood borne infection are not limited to the serious viral conditions listed above. Blood and body fluids are an ideal environment for pretty much any bacterial organism to thrive. While these infections can, in most cases, be controlled by antibiotics or the body's immune system, more serious conditions such as bacterial meningitis could be transmitted through inadequate hygienic practices.

Serious blood-borne bacterial infections are uncommon in people with a normally functioning immune system. The body's bactericidal response is so powerful that a small number of bacteria entering the bloodstream are quickly cleared. Local infection of the tattoo through inadequate hygiene is still a risk if correct procedures for sterilisation and treatment aftercare are not followed.

If you suspect that your client's tattoo has become infected, advise her to seek immediate medical attention.

ACTION AFTER POSSIBLE INFECTION WITH A BBV

If you are contaminated with blood or other body fluids, take the following action without delay:

- Wash splashes off your skin with soap and running water;
- If your skin is broken, encourage the wound to bleed, do not suck the wound –rinse thoroughly under running water;
- Wash out splashes in your eyes using tap water or an eye wash bottle, and your nose or mouth with plenty of tap water – do not swallow the water;
- Record the source of contamination;
- Report the incident to your manager or salon owner.

Prompt medical advice is important. The circumstances of the incident need to be assessed and consideration given to any medical treatment required. Treatment might be appropriate following infection with a BBV, but to be effective, it may need to be started quickly. If you do not have a medical adviser, contact the nearest Accident and Emergency department for advice, without delay.

If you think you may have been infected with a BBV, you should have access to support, advice and reassurance. Contact your GP or the nearest Accident and Emergency department immediately.

“ Under ideal laboratory conditions HIV can remain infectious in dried blood and liquid blood for several weeks and HBV stays active for even longer. ”

Health & Safety Executive - Blood Borne Viruses in the Workplace 2016

Special Considerations for First Aiders

If you are administering first aid, the risk of being infected with a BBV while carrying out your duties is small. There has been no recorded case of HIV or HBV being passed on during mouth-to-mouth resuscitation. The following precautions can be taken to reduce the risk of infection:

- Cover any cuts or grazes on your skin with a waterproof dressing;
- Wear suitable disposable gloves when dealing with blood or any other body fluids;
- Use suitable eye protection and a disposable plastic apron where splashing is possible;
- Use devices such as face shields when you give mouth-to-mouth resuscitation, but only if you have been trained to use them; wash your hands after each procedure.

It is not normally necessary for first aiders in the workplace to be immunised against HBV, unless the risk assessment indicates it is appropriate.

As a first aider it is important to remember that you should not withhold treatment for fear of being infected with a BBV.

Preventing Exposure to Blood Borne Pathogens

As discussed in the previous section on health and safety, you can protect yourself, your clients and co-workers by implementing procedures that prevent contact with blood and body fluids. Assess the risk from exposure in your treatment schedule and put in place measures to control any dangers that you identify. If you stick to a good hygiene regime, the risks are pretty much the same as performing any other beauty treatment and probably better than many, as you will be aware of the dangers.

Wearing personal protective equipment; gloves, masks, apron and hair covering will protect you from accidental exposure. Change them often, at the very least as soon as you notice any contamination or between treatments.

Gloves are probably the most effective barrier against accidental exposure. Choose good quality gloves that fit comfortably and are not too tight as stretched gloves are much more likely to split. Change your gloves often, washing and drying

your hands (see appendix) before you put on a fresh pair. Take care not to touch your skin with the outside of the glove whilst removing them. Here is some guidance from the Red Cross on the safest way to remove contaminated gloves.

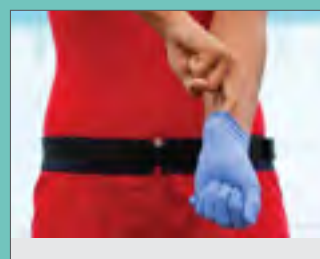
1 PINCH GLOVE

Pinch the palm side of one glove near your wrist. Carefully pull the glove off so that it is inside out.



2 SLIP TWO FINGERS UNDER GLOVE

Hold the glove in the palm of your gloved hand. Slip two fingers under the glove at the wrist of the remaining gloved hand.



3 PULL GLOVE OFF

Pull the glove until it comes off, inside out. The first glove should end up inside the glove you just removed.



4 DISPOSE OF GLOVES AND WASH HANDS

After removing the gloves:

- Dispose of gloves and other personal protective equipment (PPE) in a proper biohazard container.
- Wash your hands thoroughly with soap and running water, if available. Otherwise, rub hands thoroughly with an alcohol-based hand sanitizer if hands are not visibly soiled.



SKIN ANATOMY



It's easy to consider it as just a covering, but the skin is the human body's largest organ. The skin protects the body's internal living tissues and organs from invasion by infectious organisms. The skin also regulates fluid balance in the body to protect against dehydration and helps the body maintain a stable temperature. In addition, the skin stores water and some types of adipose tissue (fat). The skin also serves as a receptor for touch, pain and heat. The skin on your body has an exact stretchiness and strength for its location (e.g. the skin on your knuckles has very different characteristics to that found on your torso. The thinnest layer of skin is found in your eyelids at only 0.02mm thick.

“ It is important to have an understanding of the skin as it will influence your needle configuration, pigment colour selection and how often you will see your client for a follow-up. ”

It is important to understand the anatomy of the skin that you are working on. What lies within it's layers and beneath. The depth of stroke will greatly affect the appearance and longevity of the treatment. You will, with practice and our coaching, come to gauge the depth of stroke to deposit the colour at the optimum point in the skin and recognise differing skin types and thicknesses.

Human skin is made up of three groups of layers with very different physical characteristics and functions.

The outer layers are known as the Epidermis, it's the shield to our environment and is constantly renewing itself with the outer cells flaking or washing away to reveal fresh cells beneath. The middle layer is the Dermis, a complex structure containing glands, veins, arteries and hair follicles. These layers lie on top of the Subcutis or Hypodermis that provides a loose connection and cushioned protection for the muscles, organs and bones beneath.

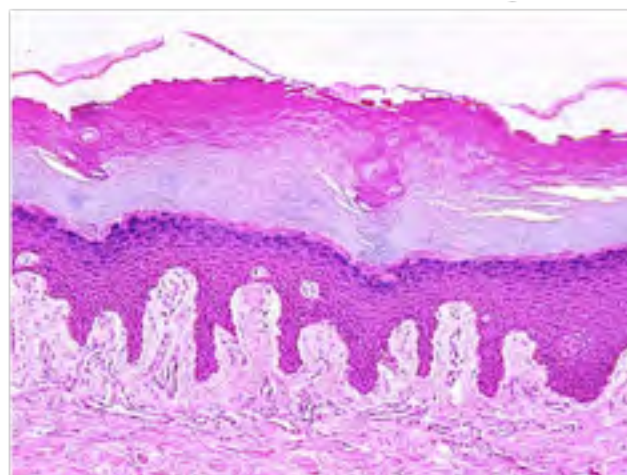
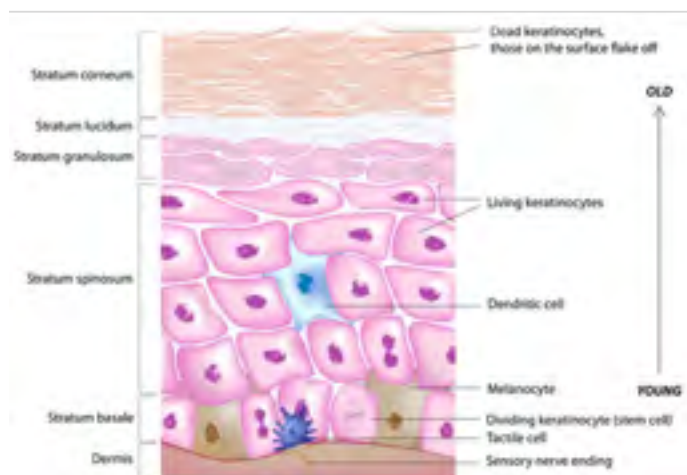
We'll now look at each of these layers in more detail.

EPIDERMIS (Outer Layers)

The Epidermis is made up of four or five layers in different areas of the body. The soles of the feet and palms of our hands have five layers, the eye, forehead and face areas have four.

There is no blood supply in the epidermal layer of the skin, instead it is nourished exclusively by diffused oxygen from the surrounding air. The thickness of the Epidermis varies in different parts of the body, from person to person and can also depend on exfoliation or exposure to the sun. It takes about 14 days for skin cells to regenerate and 4 weeks for the Epidermis to renew itself.

LAYERS OF THE EPIDERMIS



From outer to inner, the name of each layer in the Epidermis is as follows;

- **Stratum Corneum** - is the outer most layer of the epidermis, this is the part of the skin that is we see shedding under exfoliation or high UV exposure (skin peeling) or through natural discarding of aged keratinocyte.
- **Stratum Lucidum** - This thin, clear band of closely packed cells is more prominent in areas of thick skin and may be absent in other areas such as the brow area.
- **Stratum Granulosum (granular layer)** - This is a thin layer of cells in the epidermis. Keratinocyte cells migrating from the underlying layers become known as granular cells in this layer
- **Stratum Spinosum** - The layer of the Epidermis between the Stratum Granulosum and the Stratum Basale, marked by the presence of prickly cells; called also spinous layer and prickly-cell layer. Lamellar granules are found in this layer, these granules control lipids which migrate to the Stratum Corneum and contributes as a natural moisturiser to the skin.
- **Stratum Basale** - This layer of the Epidermis anchors the Epidermis to the dermal layer. This layer also contains germinal cells, cells of regeneration for all of the other epidermal layers of the skin

The epidermis is mostly made of keratin, a strong fibrous structural protein that can take many forms, both hard and soft. Keratin is also the main structural component of hair and nails.

Scattered throughout the basal layer of the epidermis are cells called melanocytes, which produce the pigment melanin, one of the main contributors to skin color. Melanin's primary function, however, is to filter out ultraviolet radiation from sunlight, which damages DNA, resulting in numerous harmful effects, including skin cancer.

The epidermis also contains Langerhans cells, which are part of the skin's immune system. Although these cells help detect foreign substances and defend the body against infection, they also play a role in the development of skin allergies.

DERMIS (Middle Layers)

The Dermis is a thick layer of fibrous and elastic tissue (made mostly of collagen, elastin, and fibrillin) that gives the skin its flexibility and strength. The dermis contains nerve endings, sweat glands, oil (sebaceous) glands, hair follicles, and blood vessels. It lies beneath the Epidermis and has two separate layers;

- **The Papillary Layer** - This is the upper layer of the Dermis. It intertwines with the Epidermis and is composed of fine, loosely arranged collagen fibers.
- **The Reticular Layer** - This is the lower layer of the Dermis, it is composed of dense irregular connective tissue which has densely packed collagen fibers. The reticular layer is much denser than the papillary dermis. This is where we are aiming to implant our pigment, at the Papillary-Reticular Junction. If we deposit the pigment any lower i.e. into the Hypodermis or the subcutaneous tissue, we lose the fine hair definition and it results of a pool of colour known as a 'colour bleed'. Your strokes will appear more hazy, patchy and may take on a blueish hue over time. If we implant the pigment above this level, i.e. into the epidermis the colour will fade very quickly because of the naturally occurring shedding of skin cells (desquamation).

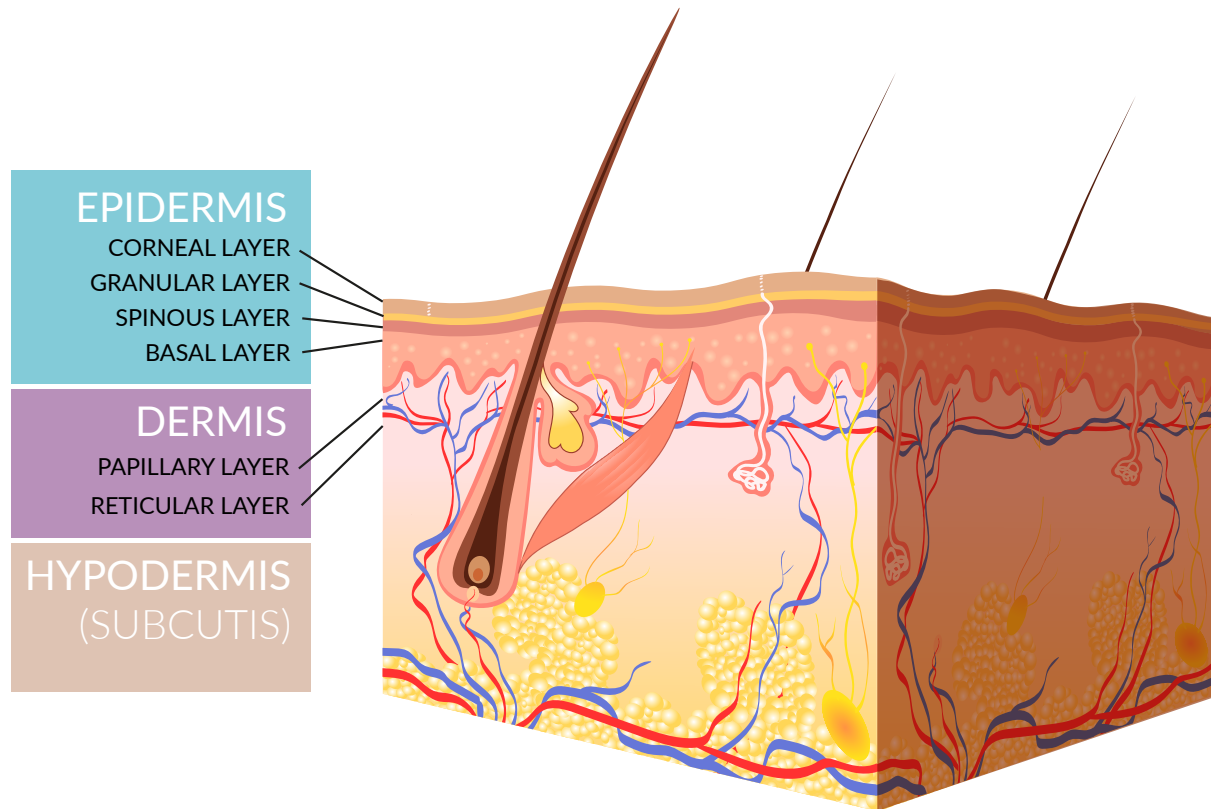
The middle layer of the skin provides lots of specialised and useful functions. Contained within the Dermis are sweat glands, sebaceous glands, blood vessels and nerves. The Reticular layer of the Dermis is the level at which hair follicles are rooted. Its thickness greatly varies from area to area of the body (from 0.3mm - 3mm thick).

A network of smaller blood vessels (Superficial Arteriovenous Plexus) is at the higher levels of the Dermis while larger arteries and veins pass through the Deep Arteriovenous Plexus at the lower levels of this layer.

The Dermis is crisscrossed with three types of fibers that lend strength and elasticity. These fibers - reticula, collagen and elastin form a network that creates stability for the skin. Type I collagen runs throughout the Dermis and is responsible for its tensile strength and for providing skin its youthful appearance of tightness, firmness and fullness. The combined strength of these tissues anchors the Epidermis above to the subcutaneous tissue in the Hypodermis below.

The orientation of collagen fibres in the Dermis creates lines of tension called Langers Lines which normally follow the direction of the underlying muscle fibres. In surgical procedures it is accepted as good practice to cut along these lines to aid healing and reduce the effect of scarring. Cutting across the direction of Langer's Lines is more likely to produce keloid (raised) scarring. Fortunately, Langers Lines usually run in the direction of hair growth in the brow.

SKIN STRUCTURE



HYPODERMIS (Inner Layer)

The innermost layer of the skin, which stores fat (adipose tissues) as an energy source, to act as a shock absorber and to conserve heat. It is very thin or not present in areas of the body with visibly thin skin (e.g. eyelids and nipples).

The attachment of subcutaneous tissue to the Reticular Dermis is loose, allowing the skin a degree of shifting movement over muscle and skeletal structures. The subcutaneous tissue is criss-crossed with connective tissue to fibers and layers interspersed with fat to hold it together.

SKIN CONDITIONS

There are many disorders that can affect the healthy function of the skin, they vary greatly in symptoms and severity. Some have situational causes and may be temporary while others can be hereditary.

Conditions that may commonly affect the brow area may manifest themselves in redness, bumpy, dry or flaky skin. Chronic conditions such as Rosacea, Psoriasis or Vitiligo may make treatment inadvisable.

Diagnosing these conditions must be left to health professionals but, if you have reason to believe that your client's skin is affected by a skin disorder, you must refer her to her doctor and obtain written medical consent for the procedure.

Local skin abnormalities such as moles and any lumps or bumps should also be referred for medical advice and should not be tattooed over. Freckles, as long as they are not raised, do not present a problem as they are just areas of increased melanin.

Scars should not be tattooed if they are still pink. It can take many months for scarred tissue to heal white though this, of course, depends upon the depth and severity of scarring.

FACE ANATOMY



KEYWORDS

ARTERY: A vessel carrying oxygenated blood away from the heart.

VEIN: A vessel carrying oxygen depleted blood back towards the heart.

LYMPH: A clear fluid containing proteins and white blood cells.

CAPILLARY: The smallest of the body's blood (or lymph) vessels delivering nutrients and taking waste directly at the tissue.

Because of complex and delicate regions of the face on which we will be working, having an understanding of facial anatomy, particularly in the brow, forehead and eye area, is important. The use of sharp instruments in this area can be dangerous unless handled with the care and knowledge that is appropriate.

THE MAJOR VESSELS OF THE FACE AND NECK

Because permanent makeup is an invasive procedure, you should know where the major blood vessels in the face and neck are located.

The scalp and face are richly supplied with blood. The large artery that supplies the head and neck is the Carotid Artery. We have one on either side of our neck, running behind and alongside the Jugular Vein in a line below the angle of our jawbone. Press your fingers to your neck below the jawline and you'll feel the pulse of blood rushing to the arteries of the head.

In this section we will explore what's happening in and beneath the skin of the face, beginning with blood supply.

Most of the bleeding associated with permanent makeup treatments is at the very small vessels, arteries and veins (arterioles and venules) just before they connect to each other to make the capillary bed. These can be in the upper part of the Reticular layer of the Dermis in the Superficial Arteriovenous Plexus.

“ Blood flow affects complexion, as well as the healing process, which is vital to the successful outcome of the treatment. ”

BLOOD VESSELS OF THE EYE AREA

The face is served its blood supply by a network of arteries (that carry oxygen rich blood away from the heart) and veins (that carry oxygen depleted blood back towards the heart). Around the eye area, these are usually grouped in artery/vein pairs delivering blood to power and nourish the muscles and tissues of the face. In some areas, they run close to the surface and, in some cases, can be seen through the layers of the skin at points such as the temples and either side of the nose. Each set of arteries and veins will branch out into many smaller blood vessels and it is these that reach up towards the upper layers of the Dermis.

At the level of the earlobe, the Temporal Artery leads to the Transverse Facial Artery, which passes across the face, circling across the lower cheek, beneath the eye, to and alongside the nose.

A frontal branch of this vein runs erratically upward to the forehead, while a larger branch runs up and along the side of the head.

As the external Carotid Artery streams upward beside the ear, it divides into the Superficial Temporal and internal arteries. A middle artery splits off right above the cheekbone and supplies the muscles around the Temple. This artery may have an orbital branch, running along the upper border of the cheekbone and to the outer angle of the orbit of the eye or, in some cases, this may be supplied by a network of smaller blood vessels. The internal Maxillary Artery supplies the deep structures of the face. Just above the temple, the Anterior Temporal Artery supplies the forehead and upper orbit of the eye.

If you trace alongside your nose from the root downward and outward, you will be roughly tracing the route of the Angular Artery and vein.

There are two Artery/Vein sets that cross the brow area. The Supratrochlear and Supraorbital Arteries are branches of the Ophthalmic Artery. The Supratrochlear Artery is fed via the Angular artery in the bridge of the nose and crosses the brow line either side of the centre.

About one third of the way across the brow from the inner corner, you can feel a tiny notch in the bone at the bottom edge of the orbit. This is where the Supraorbital Artery and vein pass through the Frontal Bone above the eye. If you have sensitive fingers, you can feel a pulse when pressing just above this notch.

The exact location and size of arteries, veins and minor blood vessels can vary and, while you may know what you can expect to find in a general area, you cannot assume that every client will be the same.

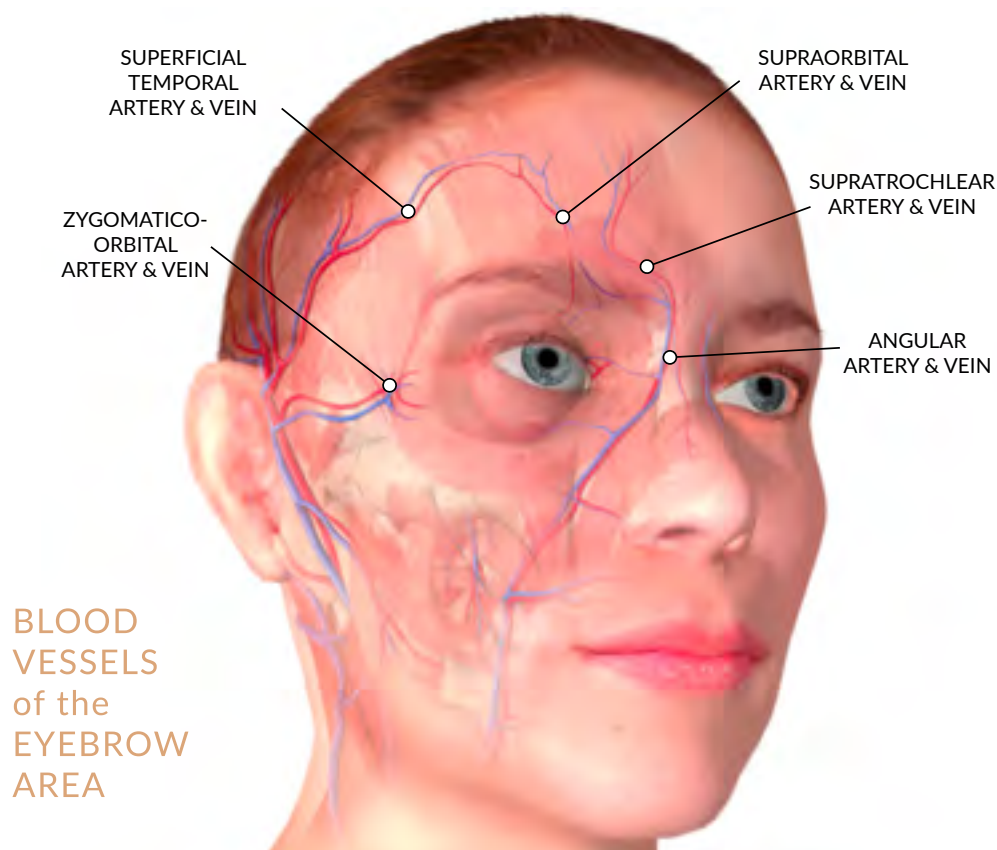
ANATOMY AND PHYSIOLOGY OF THE EYE AREA

The workings of the eye are complex. For the purposes of this course, an in-depth discussion of vision and the working of the eye is not necessary.

However, an important point to understand is that the muscles and nerves that control eye movement are interconnected with the superficial structures of the face. This is particularly relevant when they refer to the eyelids and the brow.

NERVES OF THE FACE

Nerves are tiny cord-like structures, comprising a bundles of nerve fibers that convey impulses between a part of the central nervous system and another body region.



Depending on their function, nerves are known as sensory, motor or mixed.

Sensory nerves carry information from the periphery of the body to the brain and spinal cord. Sensations of heat, cold, pressure and pain are conveyed by the sensory nerves.

Motor nerves, transmit impulses from the brain and spinal cord to the other parts of the body, especially the muscles.

Mixed nerves are composed of both motor and sensory fibers, and transmit messages in both directions.

The cranial nerves are composed of 12 pairs of nerves, one for each side of the body. They arise from the bottom of the brain and branch out to serve the head and upper neck area.

The muscles of facial expression get their motor supply from the Facial Nerve, number 7 out of the 12. The Facial Nerve in turn is divided into 5 branches, serving different areas of the face; Brow, Eye, Cheek, Chin and Neck. If you spread your fingers and hold your hand against the side of your face with the edge of your jawbone at the base of your index finger, your fingers trace the approximate route of these branches.

The sensory innervation of the face comes from the Trigeminal Nerve which divides into 3 branches serving different areas of the face; Ophthalmic (upper including eye area), Maxillary (middle) and Mandibular (lower).

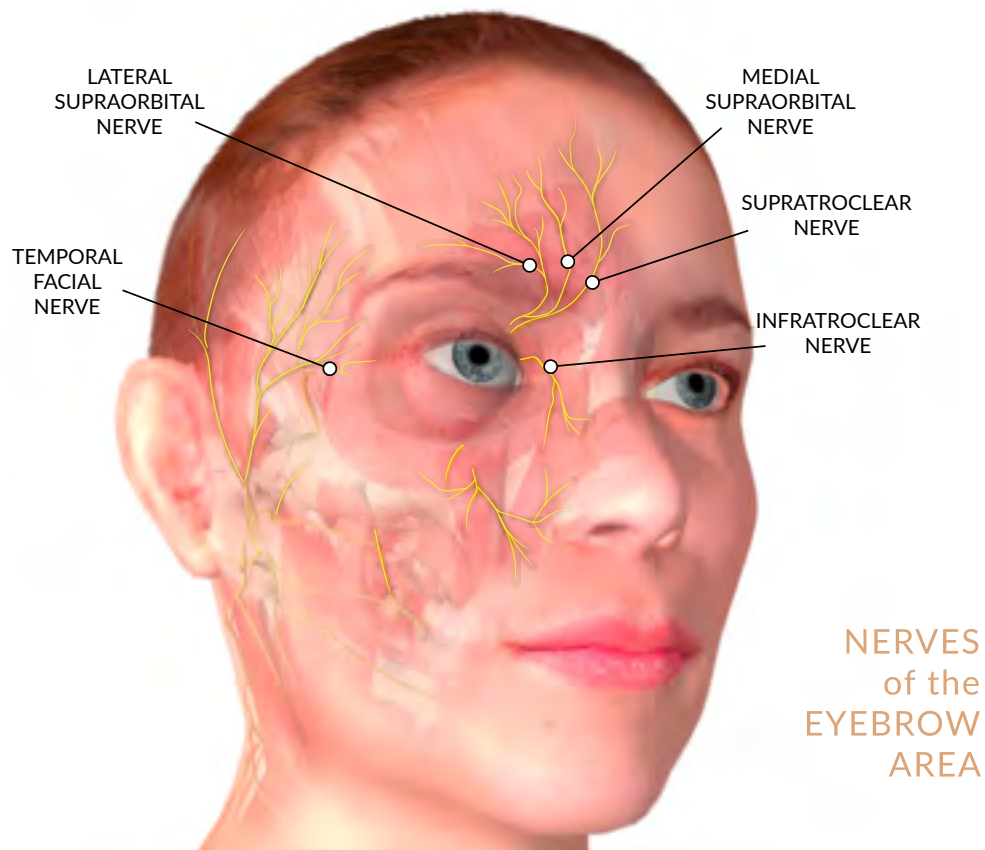
Nerve damage may result in a condition called Palsy where muscles do not receive the message to contract and just hang loose.

You may have heard of a condition called Bell's Palsy, usually linked to dentistry, where the side of the face drops due to damage at the root of the facial nerve.

This condition often will usually improve in a few weeks but it may take months or years to regain full control. Other forms of palsy can be caused by viral infection of the nerve and may never fully heal. Another reason for impeccable hygiene!

MUSCLES OF THE FOREHEAD

The scalp adheres closely to the bone and underlying muscle, and movements of the forehead muscles move the skin. We have no muscles underneath the scalp itself. Muscles of the forehead and temple fan out in the direction of the crown.



Only one muscle, the Frontalis, is in this area. Although the Frontalis is a single muscle, it can behave as if it were two.

You no doubt have seen expressions in which only on one half of the forehead was used, a lift of one eyebrow, for example. The Frontalis lies directly beneath the skin of our forehead, stretching from temple to temple and from eyebrow to approximately the hairline.

The Frontalis is the muscle responsible for lifting the eyebrows. At the same time, this muscle draws the scalp slightly forward, producing mainly horizontal wrinkles.

Although as a muscle it stands almost alone, the frontalis is still a 'team player'. In its lower middle, the frontalis blends into the Procerus, a muscle of the nose; to each side, it blends with the upper eye muscles, the Corrugator, Depressor and Orbicularis Oculi.

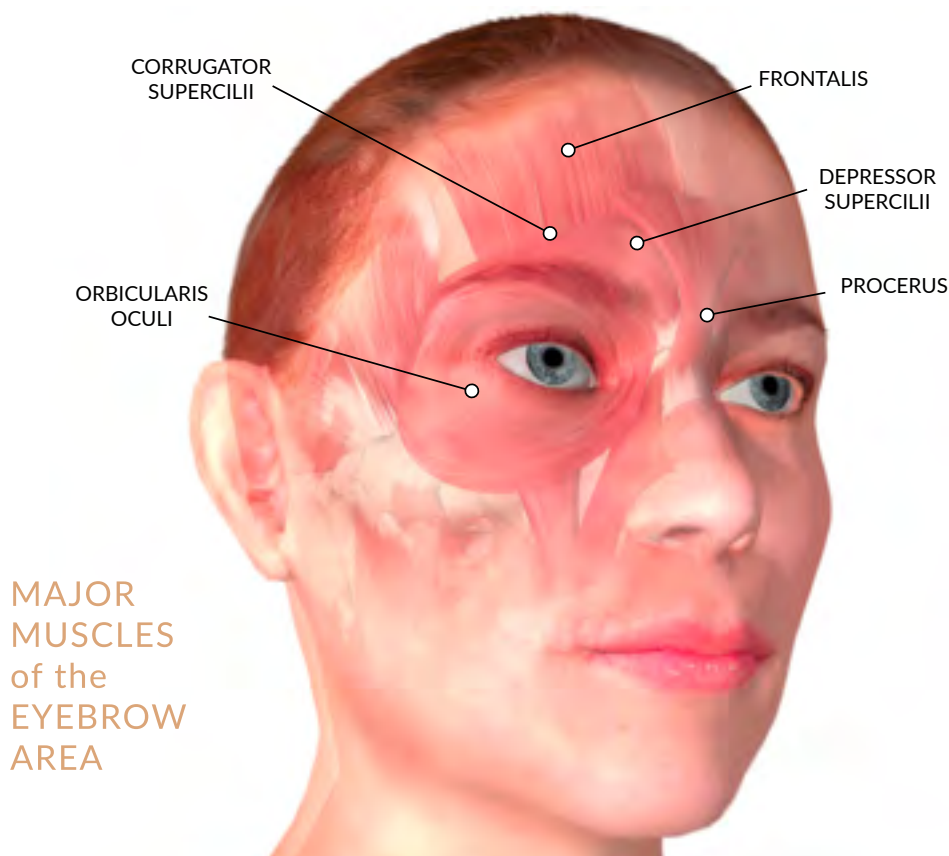
The nerve powering the Frontalis muscle is the temporal branch of the Facial nerve. It's blood supply is from both the Supraorbital and Supratrochlear arteries.

MUSCLES OF THE EYEBROW AREA

We come now to the muscles of the area around our eyes. Two muscles lying beneath our eyebrows and above our eyes have a lot to do with our brows and expressions.

Our eyelids and eyebrows are moved by these muscles: the Orbicularis Oculi, the Levator Palpebrae Superioris, and the Corrugator Supercilii. If you know any Latin, you will recognise that the orbicularis involves the orb, therefore it must involve the eye; the levator means lifting.

Let us take these muscles in order. The Orbicularis Oculi starts from the nose and wraps above the orb of the eye to form the eyelid, or palpebra, and finally fans out toward the temple. This muscle is a sphincter muscle, meaning that it contracts to close an orifice, the eye.



When the entire muscle is worked, as when you shut your eyes tightly, the skin of the forehead, temple, and cheek is pulled together, causing folds to radiate from the outside or lateral angle of the eyelid. As we age, these folds become permanent and are called crows' feet.

The Levator Palpebrae Superioris is behind and works against the Orbicularis Oculi as it raises the upper eyelid to expose the eyeball.

As for the Corrugator, this aptly named muscle is the 'frowning' muscle, drawing the eyebrow down and toward the middle, producing those vertical wrinkles we know so well.

Some of the muscles of the face are closer to the surface than in some other parts of the body, thin sheet-like muscles of the scalp and forehead are actually part of the Hypodermis.

LYMPH VESSELS & NODES

Vessels in the brow area drain lymph to the Preauricular Lymph Nodes located in front of the ears.

Lymph is a clear fluid similar to blood plasma that returns proteins and excess Interstitial Fluid to the bloodstream. Interstitial fluid is the liquid that bathes and surrounds the cells of our body tissue and exists in the spaces between cells. It is estimated that an average person has approximately 10 litres of Interstitial fluid. Lymph may also pick up bacteria and bring them to lymph nodes, where they are destroyed.

The Parotid and Auricular Lymph Vessels run across the outer brow and temple region, close to the upper region of the Hypodermis.

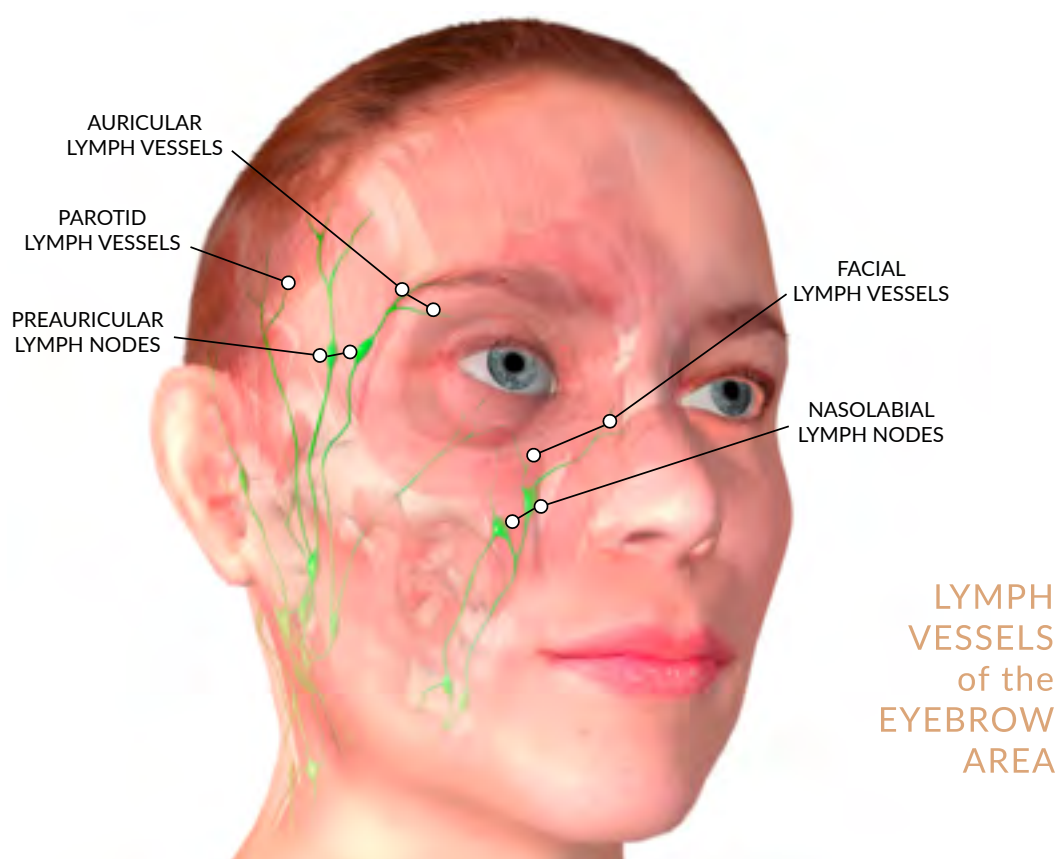
GLANDS OF THE EYE AREA

Most of the glands in the eye area are concerned with the healthy functioning of the eye itself.

The first of these glands are the Meibomian or Tarsal glands. The purpose of these glands is to lubricate the eyelids, preventing their adhesion to the eyeball and to create a seal at the edge of the eyelid. The upper eyelid contains approximately 30 of these glands but there are significantly fewer on the lower lid. The glands appear as tiny pearls in a line.

Sweat glands (Moll glands) and sebaceous glands (Zeis glands) open into the eyelash (hair) follicles. The presence of these glands can explain why applying eyeliner on a more mature or drier skinned client is easier. The more oil that is present, the more difficult it is to get pigment to hold in the skin.

The other gland worth considering is the Lacrimal Gland. This gland is the primary tear-producing gland. The tears that this gland produces are intended to lubricate and protect the surface of the eye. This gland is approximately the size and shape of an almond, and it resides in the upper, outer region of the eye socket.



The only glands in the eyebrow area itself are those normally found within the structure of the skin.

Ecocrine or 'sweat' glands open onto pores in the skin's surface. Watery sweat serves the function of regulating body temperature and getting rid of some types of metabolic waste.

Sebaceous or 'oil' glands secrete an oily substance called Sebum either; directly onto the skin's surface through a pore, or into the neck of a hair follicle.

Sebum serves a dual purpose; preventing skin and hair from becoming too dry by restricting the evaporation of water and softening the skin. It can also restrict the growth of certain types of bacteria.

As you will probably know, the skin between and above the brows, on many people, has a large concentration of oil glands. If the pores of these glands become blocked it can show on the skin as pimples, spots or blackheads. The oil can also inhibit the integration of the pigment into the skin.

Some skin types have larger or a greater amount of active sebaceous glands in this area and are more prone to this than others. The pores in the skin can vary greatly in size. If the blocked gland becomes infected it will result in a sebaceous cyst that becomes swollen producing a bump in the skin's surface and inflammation surrounding it.

It is not advisable to proceed if there is inflammation in the area being treated.

facial MORPHOLOGY



eyebrow DESIGN



FACIAL MORPHOLOGY

Facial morphology is the study of the shape and form of the face. Intricately linked to the design of brows that complement and enhance an individual's face. The design of eyebrows is sometimes referred to as 'eyebrow architecture' for good reason. You will be constructing features that can change expression, affect the perception of facial proportions and projected personality. It's definitely not a case of 'one size fits all' as the relationship between the size, shape and position of the eyebrows to the eyes and other facial features is delicate and crucial to the design of a flattering look.

Is eyebrow microblading art or science? You could say that it is both. You can analyse the dimensions of your client's face and measure out guides to find the theoretical shape and position of the perfect brow but you must then use your artistic skills to create brows that your client will be delighted to see every time they look in the mirror. There are brow shapes that will suit most faces and fashion will also affect a client's choice but; to be a true microblading artist, it will help to have a solid understanding of how eyebrow shapes can affect the balance and proportions of the whole face.

Eyebrows are a popular area of permanent cosmetics for many reasons. The eyebrows frame the eyes and allow a face to become more expressive. If a person has sparse or insignificant brows, the face also appears less remarkable, and puts undue emphasis on the eyes.

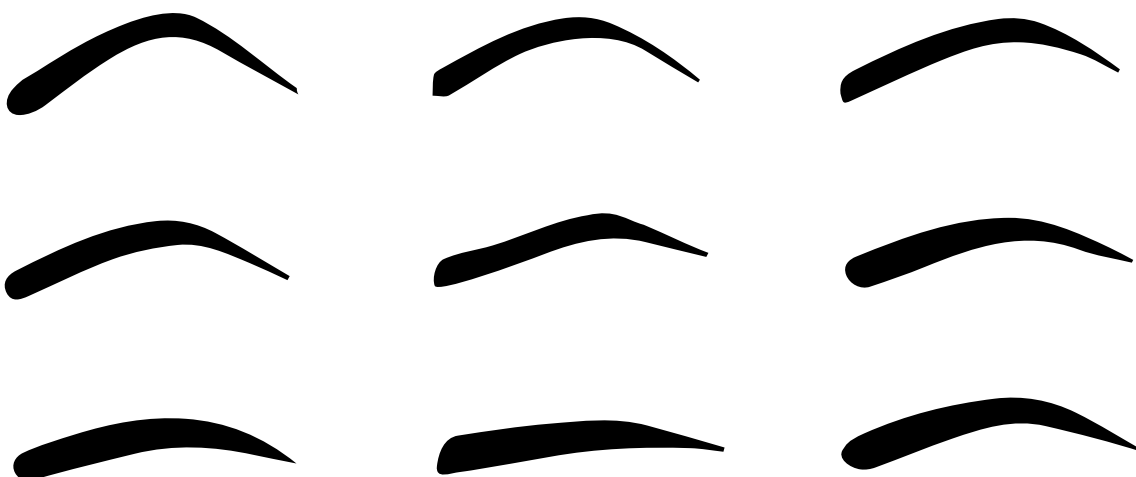
If you look closely at many women and their age groups, you'll begin to notice patterns. How a woman plucks her eyebrows is usually determined by fashion trends at the time. But plucking in a pre-determined pattern over years, can have a lasting effect on the shape.

“ Eyebrows can betray your age... or, more accurately your era. ”

EYEBROW SHAPES

There are a bewildering array of eyebrow shapes, differing by only a few millimeters but those tiny distances have such a massive effect. It helps to study the shape of brows so that you can understand how making small adjustments can alter the overall appearance. Indeed, your friends will probably wonder what's going on as you stare intently at their brows instead of looking them in the eye, it's an occupational hazard of brow artists, I'm afraid, we're not rude, we're just looking for the perfect brow shape.

A Selection of Common Eyebrow Shapes



DESIGN CHOICES

It's said that bolder brows can make a person look younger but this is only true up to a point. A flattering fullness of the brows can indeed give a youthful appearance but go too far and they appear unnatural, disconnected from the other features and may have the opposite effect.

Many makeup artists can draw (what they consider to be) the perfect eyebrow shape with their eyes closed - but there is another important factor to consider... what does the client think?. Like it or not, this is who gets the final say in the matter - it's their face after all. This can be frustrating, especially if they choose brows that are obviously unsuitable. You can ask your client to bring in examples, maybe celebrities or pictures found in magazines or the on the web. It will give an insight to the type of eyebrows they like but it may also reveal unrealistic expectations. Take time to explain your design choices before treatment, it will give your client greater confidence in your judgement and be happier with the final result.

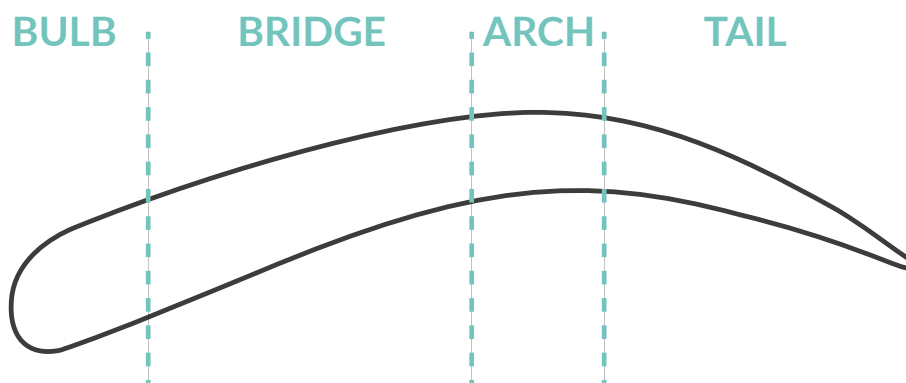
You may find that you are restricted in the angle and shape you can draw by a previously applied tattoo. If the client requests a totally unsuitable brow shape, it will be extremely difficult (and expensive) to remove and then correct. Your customers are living, breathing examples of your work, a walking advertisement for your talent. Take pride when they leave, that you have given them your best.

The eyebrow is a focal point of the face. The placement of the arch and the length of the tail can give an illusion that alters the proportions of the face.

Subtle changes make big differences to the overall appearance of the face.

THE BULB

The bulb is the beginning and anchor of the eyebrow. The position of the bulb is the most important part, as its placement will dictate the rest of the eyebrow shape.



An approach that is very revealing is to ask the client to arrive at the consultation/appointment with their eyebrows already drawn. You can then remove the makeup on one of their eyebrows and draw your own 'ideal eyebrow'.

You can then reach a decision together, by covering each side in turn, asking the client which they prefer. Be patient, though... designing a brow shape the client is happy with can take up to half of the appointment time, but it's worth it if you can agree on a shape that will really suit.

What if the client still insists on something that you know is not going to work? For example, if a client requests a 'McDonald's arch', or having waxed their eyebrows requests that the eyebrows be drawn above their natural eyebrow line, we would recommend that you politely decline to do the treatment. Work outside the natural brow line is extremely difficult to reverse, and clients often regret it later in life or when friends and family give a honest opinion.

The eyebrow should should begin by measuring up from the side of the nose through the inner corner of the eye - according to conventional make-up theory.

However, a wide nose will mean that the eyebrow is placed too far back, making the nose appear larger. In instances of wide a nose, we would recommend measuring from the inner corner of the eye instead.

The distance between the eyes should also be considered. If the width between the eyes is greater than one eye's width, we would recommend bringing the bulb in slightly to make the face appear more symmetric. Although we would only recommend doing this one you are confident with your technique, as any imperfections in this area will show up more vividly here, due to no hair being able to cover it.

FACE SHAPES



HEART SHAPED

A face with a prominent forehead and a sharp taper towards the chin, which is often pointed.

While balancing the sharpness of a pointed chin, a low arch and gently curved brow will also make the forehead appear longer. Add volume to reduce the prominence of the forehead.



OVAL SHAPED

A face that gradually tapers towards the chin with prominent cheekbones and broad forehead.

Soft angled brows will not upset the proportions of what is generally considered to be an ideal face shape.



SQUARE SHAPED

The square jawline is a prominent feature of this face shape where the forehead, cheekbones and jawline are almost the same width.

A curved eyebrow shape with a sharp angle will offset and help balance the strength of a prominent jawline. A sharp peak at the top of the brow will make it appear longer.



DIAMOND SHAPED

An angular and bony face shape that is widest at the temples.

A curved eyebrow shape without a sharp angle will help to soften features and reduce the wideness of the face at the temples.



ROUND SHAPED

This type of face is almost as wide as it is long with the widest point at the cheeks.

A high arched brow is perfect for this type of face, drawing the eyes up and down to help lengthen the appearance of the face. Avoid gentle curves as they will only make the face appear wider.



LONG SHAPED

An elongated face that gradually tapers towards the chin which is often a prominent feature of this face shape.

A flat eyebrow shape complements a long face, making it appear shorter.

THE BODY

The body is the central part of the eyebrow including the Bridge and Arch.

THE BRIDGE

The bridge is the extension of the bulb to the arch. Although angled, it is important to keep this area flat as too much arch in this section will create the dreaded 'McDonald's' eyebrows.

THE ARCH

The arch is the 'high point' of the eyebrow.

- To create the illusion of a wider face, the arch should be placed on a line from the nose, through the iris of the eye, so the arch is placed further out.
- To create the illusion of a thinner face, the arch should be placed on a line from the nose, through the pupil, so that the arch is placed further in.

THE TAIL

The tail is the end of the eyebrow. The position should be established by measuring with a line, plane from the nose to the outer corner of the eye. If the client has any existing hair here, typically it will be thin and sparse.

An important note, for the correct angle ensure that the bulb is not placed significantly lower than the tail, nor the tail dramatically lower than the arch.

HOW FACE SHAPE AFFECTS EYEBROW DESIGN

When designing brows, it is very easy to look at the tree bark, but not see the forest. Or, in plain English... to agonise over small details but ignore the overall impact the eyebrow has on the face.

Look at the overall shape of your client's face and decide which of the standard types she most resembles. Knowing which brow shape naturally suits which type of face is a good starting point for your brow design and gives some solid principles to build upon.

CREATING FACIAL BALANCE WITH EYEBROWS

The shape of the face will have a great influence on how the eyebrow is designed.

- **Wide face.** (e.g. square, round, diamond, heart) slightly shorten the brow to create a slimmer appearance.
- **Narrow face.** (e.g. some diamond, oblong, oval faces) slightly lengthen the brow to give a wider appearance.
- **Angular face.** To soften the face particularly for clients who have an angular face (e.g. diamond, rectangle, square) the arch can be rounded more, to soften the face.
- Very round faces. (e.g. heart or round) a more angular arch will give the face sharper lines and definition.

DESIGNING 'AGE-PROOF EYEBROWS'

We have a tendency with beauty to select what we want today. We don't like to imagine how we will look as our faces mature. And with conventional make-up products, why would we? Trends in shapes and colours come and go, and you can adjust your look (and the contents of your makeup bag accordingly).

But as a permanent cosmetics artist you have a responsibility, to create an eyebrow shape which still good as your client's face matures. This isn't as difficult as it sounds, once you set some ground rules.

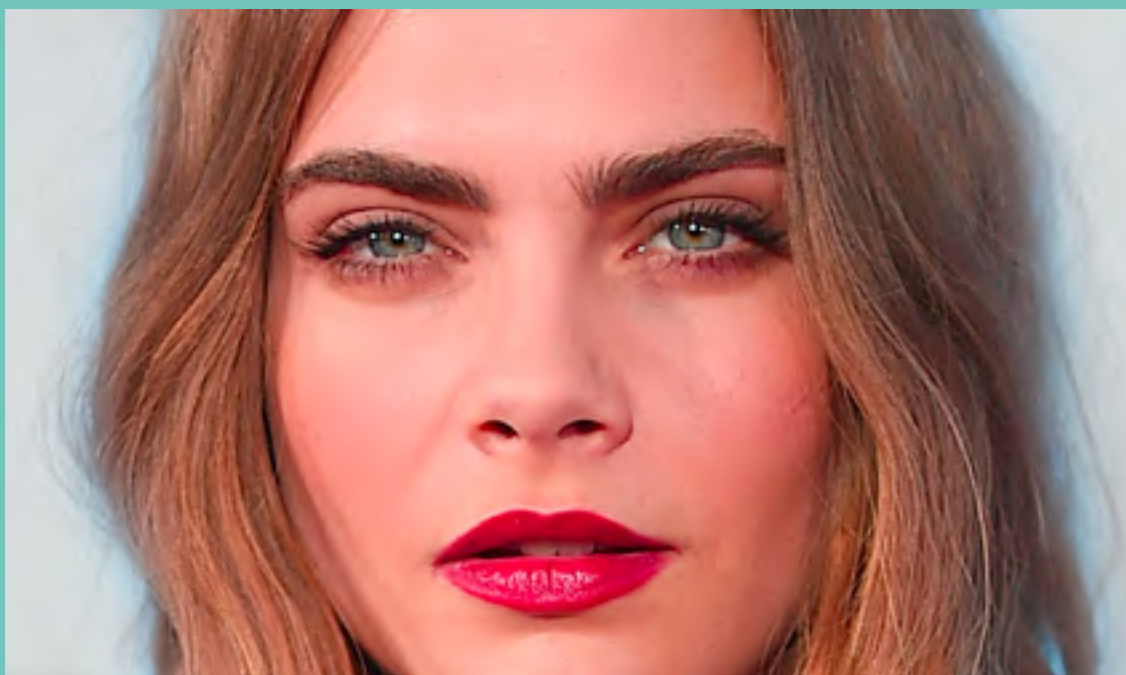
COLOURS

Unlike with eyeliner tattoos colours (which have a tendency to vary seasonally) natural looking eyebrow colours are always 'on-trend'. Your responsibility as an eyebrow artist is to know your colour theory to accurately select the right pigment and avoid discoloration later. Skin tone, undertone and natural hair colour all play a part in colour selection. These subjects are covered in following sections of this reference manual.

PLACEMENT

Always try to place the eyebrow in the area that natural hair grows. In the absence of natural hair, aim to follow the brow bone as a guide. If you are adding emphasis or shading to natural eyebrow hair, following the natural eyebrow placement is important. This way, new eyebrows or enhancements to existing eyebrow hair will then age naturally along with the skin in which it is placed.

WHAT DO YOUR CLIENT'S BROWS HAVE IN COMMON WITH CARA DELAVIGNE'S?



Cara Delavigne - Model/Actress

Probably nothing. . .

Clients will often bring a magazine clipping or photograph of a celebrity's eyebrows they admire, or themselves in younger days. The client may like something on paper or in theory, but the actual look may not appeal to them once you put it on with pencil - Why do Cara Delivigne's eyebrows look so great on her (aside from her gorgeous eyes, of course)? Because they suit *her* face shape. It is important then, that you manage customer expectations from the outset and recognise the limitations of what can be achieved.

But don't completely dismiss it, because it can provide a valuable insight and understanding into your client's desires, and help you to tailor your recommendations. To be completely successful, the design stage should be a two-way process. In most cases, celebrity photos and suchlike should be viewed as a useful starting point, not the end goal.

Some clients will prefer to draw their eyebrow tails slightly above the brow bone, which may not be suitable for someone who wishes to receive botox treatments in the near future as it can slightly distort the eyebrow shape. It is important to ask clients if they plan any facial cosmetic surgery or botox treatment in the near future.

Step back often from your design to assess it in the context of the rest of the face. If your client is lying back, ask them to sit up, frown, smile and move their eyes to check placement before committing to the final outline.

EYEBROW EXPRESSION

How your eyebrows are spaced, and their angles create the illusion of different expressions on the face. The aim is to create brows that are expression neutral.

- *Too arched or too high* - Surprised look.
- *Too close* - or too sloped downward Unhappy, serious and of the eyes being further set.
- *Too far apart* - A blank, indifferent expression and of the eyes being too far apart.

REASONS FOR MICROBLADING

During your career with permanent make-up, you will encounter a variety of customers, with a broad variety of reasons for requesting microblading. Including:

- Sparse or thinned eyebrows.
- Fair or invisible eyebrow hairs.
- Discontinued, scarred or patchy eyebrows.
- Alopecia.
- Asymmetric, uneven eyebrows.
- Drooping eyebrows.
- Short eyebrows.

As the reason for wanting the treatment can influence the procedure itself, it's so important, at the consultation stage, to discuss with your client why they are considering microblading and to find out what their expectations are. If they have unrealistic expectations, now is the time, before treatment commences, to explain how microbladed brows can benefit their particular needs on their particular face.

The situation that you must try to avoid is; carrying out a semi-permanent treatment and then the client having a change of heart, for example, when friends and family see the results.

Whatever the reason for your client considering this treatment, there are some great benefits from having semi-permanent brows.

Many clients may have heard of microblading, it's difficult not to if you follow beauty topics in the media, but they may not understand how the treatment differs from traditional cosmetic tattooing. Some may even want the effect of block brows from machine based tattoos, so show them plenty of pictures.

Before and afters are a great way of showing off the benefits of the treatment. Explain the healing process and how the results will change over time. An informed client that works with you on the design process will know what to expect and be happier with the results, avoiding the chance of wasting time and effort on corrective treatments.

BENEFITS OF MICROBLADING

Some of your clients, unfamiliar with the procedure may be expecting their brows to turn out with dense block colour, like machine applied brows.

Some may even think that microblading is an inferior technique due to it's manual application. This would be a good point to remind them of some of the benefits of this amazing treatment.

- Results last up to 12 months (aftercare dependant) so your brow look can stay on point.
- Realistic hair strokes instead of block colour.
- Individual hair strokes allow natural feathering effects.
- Edges of microblade strokes are crisp and well defined.
- Can carry out partial treatment to extend, repair or add volume to natural brows.
- Colours tend to fade more naturally over time.
- Less deep trauma and less discomfort than a tattoo.
- Simple yearly refresher treatments keep the brows perfect.

COLOR THEORY



KEYWORDS

PRIMARY COLOUR: A colour that can't be created by mixing other colours.

SECONDARY COLOUR: A colour created by mixing two primary colours.

TERTIARY COLOUR: A colour created by mixing one primary and one secondary colour.

HUE: Any colour or mix of colours.

COMPLEMENTARY COLOURS: The hues opposite each other on the colour wheel.

SKIN UNDERTONE: The dominant hue beneath the outer layer of the skin, the epidermis.

In addition to eyebrow design, and knowledge of your hand tool an understanding of cosmetic colour theory forms a cornerstone of successful permanent cosmetic procedures.

Colour is complex subject and it would not be possible to cover all the intricacies of colour theory in a 5 day course. You will, however, find that it is very useful to understand the basic principles of what colour is and how it can be modified and mixed, so that you can select, modify or correct the pigments that you use in every treatment.

WHAT IS COLOUR?

Colour is our perception of the different qualities of light that is emitted (shone) or reflected (bounced) from an object. Colours mix in different ways depending on whether it is light that is being shone (additive) or light that is being reflected (subtractive).

When dealing with pigments, inks or paints we must use the rules and principles that govern subtractive colour. An object appears to be a certain

ADDITIVE COLOUR

This is our perception of the light that is emitted by an object e.g. the Sun, a lamp, a TV screen etc. Our eyes detect three additive primary colours (red, green and blue) if they are of equal intensity we see it as white.

All of the other colours that we see are just a result of a difference in the brightness between these 3 colours. For example; on a computer screen, every colour will be described by the amount of

“ We know that even the most brightly coloured object, if taken into total darkness, loses its colour. Therefore, if an object is dependent upon light for colour, colour must be a property of light. ”

Paul Outerbridge - Photographer 1896-1958

colour because the light that has been reflected from it has been changed by it's surface.

Some colours in the light are absorbed or blocked (subtracted) and we see only the colours of light that are bounced off. The more colours of light we block, the more of the colour spectrum is absorbed until all of the colours together produce black. If no colours are subtracted then the object appears to be the same colour as the light that is shining on it, or white.

red, green and blue that it takes to make it, known as it's RGB value. If each colour is set at it's maximum, we see white, if Red, Blue and Green are 0, we see black.

You may have noticed that the primary colours of the additive colour model; Red, Green and Blue are different to the primary colours that you may be used to. This is because additive colour works in a completely opposite way to mixing paints, for example. When mixing light, the more colour we add, the brighter the result.

SUBTRACTIVE COLOUR

As the skin and our pigments only reflect light and do not produce it, for the purposes of makeup, we need to play by the rules of colour that is reflected (subtractive colour). As mentioned previously, subtractive colour is our perception of the light that is bounced from an object after other colours have been absorbed or blocked by that object. For the rest of this section and anywhere that we reference colours that are used in pigment or skin we will be referring to the **Subtractive Colour Model**.

If we know which colours block the three additive primary colours we can then make any colour by adding pigment colours that reduce (subtract from) the amount of these colours that is reflected. Traditionally, we use a combination of the 3 primary paint colours (Red, Yellow and Blue) to achieve this.



PRIMARY

YELLOW
RED
BLUE



SECONDARY

ORANGE
VIOLET
GREEN



TERTIARY

YELLOW ORANGE
RED ORANGE
RED VIOLET
BLUE VIOLET
BLUE GREEN
YELLOW GREEN

Secondary & Tertiary Colours

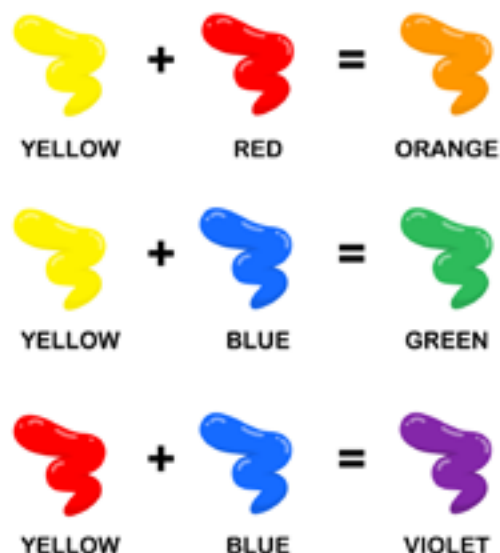
Secondary colours are those that are produced when we mix together 2 of the primary colours.

Tertiary Colours are created by mixing a primary colour with a secondary colour and; if we arrange them next to each other in a circle, we have what is known as a colour wheel.

The Colour Wheel

Colour wheels are used by designers to find to find colours that work well together but in permanent makeup our main use for them is to find the opposite (complementary) colour, define colour characteristics and establish colour relationships.

Complementary colours can be used to counteract each other without making them darker or lighter. This is very useful when trying to mix natu-



Primary Colours

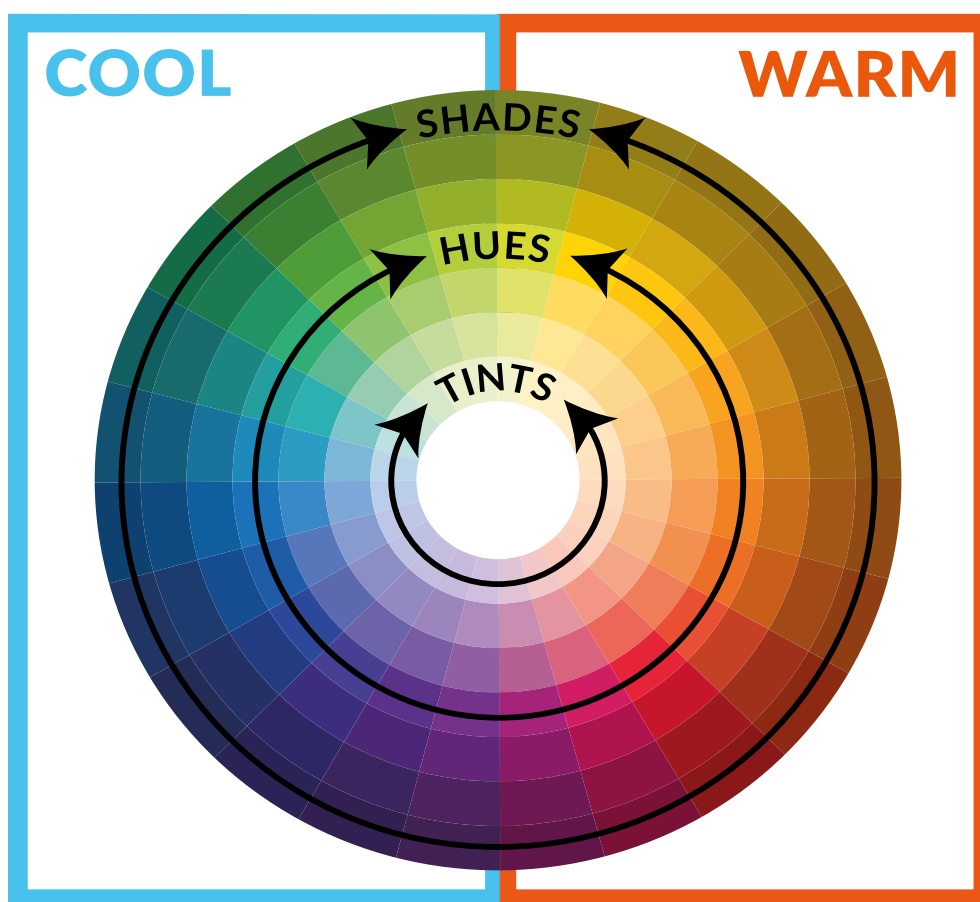
These are the 3 colours that can't be made by mixing other colours. In the subtractive colour model they are Red, Yellow and Blue. We can make all the other colours of the spectrum by mixing these 3 primary colours.

ral looking colours. For example, if you had mixed a colour that was too red, you find the opposite Hue (colour) on the wheel and add a little green to counteract the red. What we often call neutral colours are the result of mixing complementary hues as the resulting colour is most often a natural, less vibrant, brown or grey.

HUES, TINTS, SHADES AND TONES

You will probably hear these terms used when describing colours and it's useful to know their definition.

- **Hues** - are simply any of the colours that you can find on a colour wheel.
- **Tints** - are any Hue with white added to make it lighter.
- **Shades** - are any Hue with black added to make it darker
- **Tones** - are any Hue with black and white (grey) added to reduce it's intensity



COLOUR TEMPERATURE - COOL & WARM COLOURS

We may be familiar with the concept of colours being either cool or warm in the context of fashion or interior design where the so-called temperature of a colour is rooted in our associations with nature.

Colour temperature has a different function in the context of Permanent Cosmetics Colour Theory. We classify colours as either cool or warm as an aid to identifying skin tones, selecting pigments to work with a client's skin undertones and correcting or modifying pigment colours.

As you will discover later, it sometimes difficult to identify exact hues in skin that is made up of many shades, hues, tints and tones but you will find it easier to establish colour relationships when classified as either warm or cool.

The idea of warm and cool colours is based on our psychological associations with colour and, in different circles, the exact point at which warm colours become cool is a matter of debate.

In permanent makeup colour theory we are simply using warm and cool as ways to classify colours so the dividing line on the colour wheel is clearly defined. Colours anti-clockwise of yellow-green and clockwise of red-violet are considered to be cool (the blue side of the colour wheel) while the orange side of the wheel is said to be warm.

HOW LIGHTING AFFECTS THE PERCEPTION OF COLOUR

Lighting in your workplace will affect your perception of colours. The colour that we see is the light from your lamp or window reflected from the surface that it is shining on minus the hues that have been blocked or absorbed by that object. If the light already has a slight colour tint, it will change how we perceive it. Different types of 'white' bulbs give out varying colours of light. When viewed on their own, our eyes adjust to compensate but if you put an old style tungsten bulb next to a 'daylight' LED lamp you'll immediately notice the difference.

To see the 'true' colour of an object, there's nothing that matches daylight. Light from the sun contains all the colours of the visible spectrum in fairly equal proportions.

Even so-called daylight lamps create white light using just the primary colours and our senses fill in the gaps. To check how well specialist lamps perform in being able to render accurate colours you can check it's CRI rating. The CRI (colour rendering index) is a number between 1 and 100 used to describe the ability of a lamp to accurately render all the colors in the lighted space. For example, a CRI of 80 or above normally indicates that the source has good color properties; it would not significantly distort or diminish the colour of the object being illuminated.

You should also consider the effect that the colour of the environment will have on the colour that you see. Some of the light that is shining on your subject will already have been reflected from, and coloured by, your walls, ceiling or even furnishings. We're not suggesting that you redecorate your salon but if you have a brightly coloured environment it will help to be aware of the potential effects and be able to check colours in a neutral area or under the illumination of a strong reference lamp. Remember, you should be looking for potential problems under the harshest of lighting, colour issues will not be visible in a dimly lit environment.



Fluorescent lighting: The standard fluorescent tubes that you'll find in most offices project a lot of green light. Blues, violets and Oranges appear darker, and in some instances appear almost black.

Tungsten Filament Lighting: This is the older style incandescent bulbs. These have a yellow-orange tint. Greens and blues appear darker and warm colours appear stronger.

'Daylight' LED Lamps: These are becoming very popular in salon environments. The cheaper ones just have extra blue added. This will accentuate blues, violets and greens while darkening oranges and reds. If you are paying extra for a specialist daylight lamp, be sure to check that its Colour Rendering Index is above 80 to ensure accurate colour rendition.

PERMANENT COSMETIC COLOUR THEORY (PCCT)

So far, so good, but in permanent makeup we have to deal with a host of complicating factors, combining pigment colours with the colour of the 'canvas' itself (the skin undertone) and then seeing through a translucent overlay when the Epidermis heals and covers the pigment. The depth of the pigment in the skin and repeated exposure to strong sunlight also plays a part in PCCT so we must be mindful that the colour that we mix and use on the day of treatment will change over time.

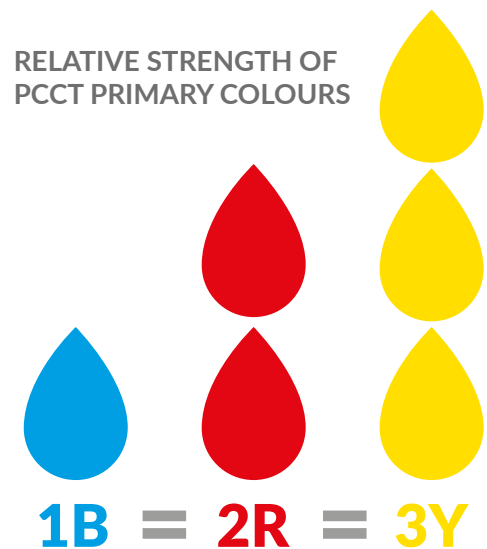
We will go on to discuss the colours as they are used in permanent cosmetics. Influenced, not only by traditional colour theory (TCT), but real world experience with many types of skin and pigment.

PCCT PRIMARY COLOURS

The primary colours, red, yellow and blue are the foundation of all the other hues that can be mixed. When mixing colours and deciding on the quantities of each to add it's important to bear in mind that colours in pigments and the skin do not mix equally. Blue is stronger than Red which in turn is stronger than Yellow.

The relative strengths of the colours in pigment form is roughly **1 x Blue = 2 x Red = 3 x Yellow**.

In other words; 1 drop of blue pigment has the same strength as 2 drops of red or 3 drops of yellow. This will become particularly important when mixing or applying colour corrections. Blue is so strong, compared to the other colours, that it must be used sparingly in any mix.



RED PIGMENT

While it would be difficult to think of red as a cold colour, permanent cosmetic pigments tend to have a bias towards a warmer orange version or a cooler violet version.

- Warm red pigments have a bias towards orange.
- Cool reds a bias towards violet.

Red Skin Undertones

Skin undertones that have a red influence are;

- Rosy skin undertone type.
- Ruddy colours (red-violet) that are included in the transparent (violet) skin undertone family.

YELLOW PIGMENT

When you refer to your colour wheel you can see that Yellow is on the border of cool and warm.

- Warm yellows have a bias towards orange.
- Cool yellows, a bias towards green.
- To provide a neutral (less extreme base) for eyebrow pigments, a cool or warm yellow is often the main colour agent.
- Referring to your colour wheel, you will see that yellow is the complement to violet. It can, therefore, be used to neutralise violet eyebrows.

Yellow Skin Undertones

- Skin undertones that appear yellow or sallow are more neutral skin undertone types.

BLUE PIGMENT

Pure blue is not used as an independent mixing agent for eyebrows (only eyeliner or tattoos). Some blacks have a tendency to fade towards blue. Blue is designated as a 'cool' colour in the cosmetic industry, there is no 'warm' variant of blue pigment, it is either:

- Cool violet based.
- Cool green based.

Blue Skin Undertones

- Skin undertones that have a blue influence are translucent skin types.

ORANGE PIGMENT

From your colour wheel you can see that orange is considered to be the warmest colour, it's right in the middle of the warm side of the wheel. You can also see that it's the direct complement to blue. By adding a drop or two you can change a base colour to a warmer tone. It's main uses are as a corrective colour:

- Colour correction of existing eyebrows to a warmer colour. (e.g. from blue or grey).
- Correction of grey, blue or green (less common) eyebrows.

Orange Skin Undertones

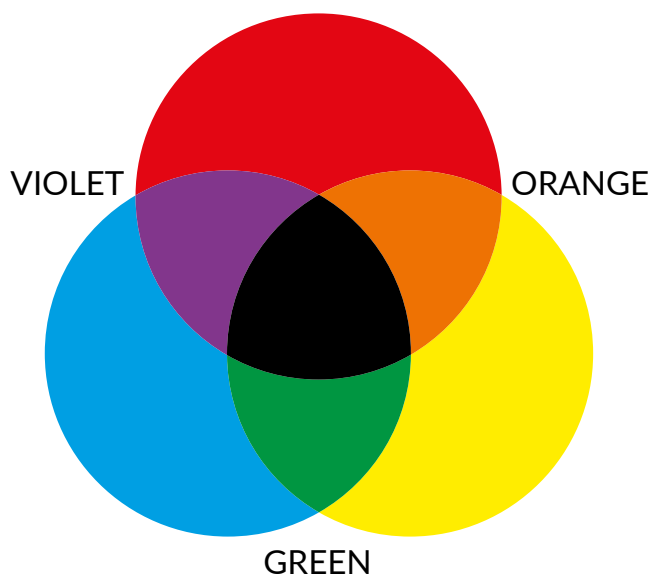
- Skin undertones with an orange influence are known as 'peaches and cream'

“ It's much easier to make a colour darker, than it is to try to lighten it! ”

PCCT SECONDARY COLOURS

The three secondary colours are the result of mixing the three primary colours. They are:

- Orange (red & yellow)
- Violet (red & blue)
- Green (blue & yellow)



GREEN PIGMENT

Green is the product of mixing blue and yellow. It's the direct complement to red. Green is grouped amongst the cool colours. Like orange, its purposes for permanent cosmetics serve mainly a corrective one:

- Modifying the colour of an existing eyebrow to a cooler hue.
- To correct the colours red or orange in eyebrows.
- In rare instances when black, brown, black-brown or brown-black turn red or orange years later, green would be the corrective colour used.

Green Skin Undertones

- Skin undertones that have a green influence represent olive skin undertone types.

VIOLET PIGMENT

Violet is made by combining blue and red pigments.

- Violet is only used for lip pigments or body art and is never used as a base colour for eyebrows.

Violet Skin Undertones

- Skin undertones that appear to have a violet influence are represented by transparent skin types.

PCCT TERTIARY COLOURS

Tertiary colours are the result of mixing a primary colour and the secondary colour. These are not often used except as corrective colours.

- Yellow-Orange - Usually used as a correction colour for blue-violet.
- Yellow-Green - Most often seen as a correction colour for red-violet.

Composite Colours - Brown, Black, Grey and White

Composite or intermediate colours are the combination of colours that are not next to each other on the colour wheel and are often a combination of 3 or more individual hues. Mixing a colour with its complement (opposite) will produce an intermediate (usually brown or grey). The proportions of each colour will determine the dominant hue. Most of the colours that we deal with in a biological context are the result of the combination of multiple hues so intermediate colours are of great importance in permanent makeup.

The pre mixed pigments that you buy are carefully formulated, composite colours that fit the most common skin types and permanent makeup applications. The 'pure' colours are normally only used to correct a bias in an intermediate colour towards a particular hue.

BROWN

Brown is the composite eyebrow colour that you will use most, a natural choice for eyeliners, too.

- Browns are usually defined by the dominant hue and can be warm or cool.
- Brown colours cover a wide visible spectrum and can have a yellow, red or; most commonly, an orange base mixed with black.

BLACK

Black is almost never used on its own as it can look unnatural in its pure form and can have unpredictable results when fading. Black is typically used as either:

- An eyeliner colour.
- An additive to make other colours darker (e.g. brown).
- Mixed with a small amount of white to make grey.

WHITE

White should only be used with extreme caution and never as a novice technician. The pigment molecules are very large and problematic to mix. It will remain visible in the skin long after the colour(s) it was mixed with fades and appear to "float" on the skin.

COMPLEMENTARY COLORS

Complementary colours are pairs of colours that are opposite one another on the colour wheel and; when viewed next to each other, provide a high contrast. When mixed, they counteract one another and are used extensively to correct and modify colours.

The complement of each primary colour (red, blue or yellow) is roughly the colour made by mixing the other two primary colours together:

- Green is the complement of Red. Green = Blue + Yellow.
- Orange is the complement of Blue. Orange = Red + Yellow.
- Violet is the complement of Yellow. Violet = Blue + Red.

When using primary colours to adjust or correct, remember the relative strengths of the primary pigments in permanent cosmetics.

1 drop of Blue is equal to 2 drops of Red or 3 drops of Yellow. (1B=2R=3Y).

Example: If you had a client with an old tattoo that had faded to a violet (cool) shade. We would use the complement of blue/violet to correct it. With a yellow/orange pigment we would be able to restore it to a natural brown. As violet contains blue and this is the strongest colour (3 times stronger than yellow) we would probably need to restore the colour over a two or three appointment period.. This is also applicable to Grey.

This is not the same for every client. Remember

PIGMENT + UNDERTONE = OUTCOME

- If an eyebrow has healed to a shade of grey or blue (cool) then orange (warm) would be used to neutralise or warm up the healed shade of grey.
- If an eyebrow has healed or aged to violet (cool) yellow or yellow-orange (warm) would be used to neutralise it, yellow is the complimentary colour to violet.

Due to the relative strength of blue, it would rarely be used as a corrective pigment. Green is a better choice of complement to orange and should be also used on the rare occasions that you need to correct red in an eyebrow.

COLOUR CORRECTION

Due to the many factors affecting the final appearance of pigment in the skin, you will find that colour correction and adjustment is an essential part of your work. Here are some of the scenarios in which colour correction may be required:

- Colour adjustment after the brow has healed. It may be too warm, too cold or showing an unwanted bias towards a particular colour.
- Poor maintenance i.e exposure to ultra violet, exfoliation or medication/chemicals.
- The tattoo is old and the integrity of colour has changed or deteriorated.
- Client's age combined with age of tattoo. As we get older the composition of the skin changes, this can sometimes change the classification of skin undertones.

It is essential to accurately read a client's natural undertones in order to implant the correct shade of pigment. Time and effort at this stage will help to prevent the need for future corrective treatment. This will be covered fully in the next chapter where we will discuss skin tone.

You may be approached by clients seeking help to correct another artist's work. We advise that you avoid colour correction work until you have gained enough experience to feel truly comfortable in reading a client's skin tone. Whilst building upon your newly acquired skill set you do not need your professional reputation sullied by being the latest technician to work on someone else's mistakes.

Colour correction normally requires at least three appointments to correct old and faded work. Especially if the brows have faded to a purple or violet colour, this is due to the strength of the blue component in the colour. This should be given careful consideration as three appointments for colour correction will impact upon the cost.

“ Natural-looking eyebrow colours are always ‘on-trend’. Your job as an eyebrow artist is to know your colour theory to avoid discoloration later. ”

When Colour goes Wrong !

Although this is something we would all like to avoid, this is something that every artist will experience in their career. We can take steps to minimise unwanted results by going a few shades lighter in the first pass and waiting for the healed results before adding a more intense colour on the second visit, if your client is in agreement. It is far easier to correct an eyebrow that is too light than it is to do a corrective treatment on an eyebrow that appears too dark.

The use of Iron Oxides in some pigment compositions means that, as colour fades, the instability of the formulation can leave behind undesirable tones. Normally the most dominant colours, i.e red, blue or some variation of red & blue, resulting in purple or salmon coloured brows.

A mauve or purple brow is the combination of blue and red pigments (primary colours) being left behind as the client's brow has faded over time.



This can sometimes be an indication that the initial colour implant has been placed too deeply into the skin, normally the hypodermis (subcutaneous layer). The corrective colour in this case would be a yellow/mustard colour. This is quite a complex colour to correct.

Colours placed too deep (into the deep Reticular Layer of the Dermis or the Hypodermis) are complex in terms of correction because of the 'bleed' or pooling of colour. This results in blocks of colour as opposed to fine pronounced lines. The corrective procedures are, therefore, advanced and complex. The only corrective application in this instance is by advanced techniques such as shadowing or powdering techniques. These methods require the colours to be built up gradually, otherwise you run the risk of ending up with a block of the yellow based pigment that you have used to neutralise the undesirable colour.

Salmon/Pink Brow Correction - The approach we would normally take would be to add the complimentary colour on the colour wheel, in this instance it would be an olive green. By adding a green/olive base pigment the final result will be brown. Be careful to ensure that you have correctly identified the client's natural undertones. The olive pigment can be used to go over the old hair strokes which will result in a healed colour of natural brown. In essence, a salmon coloured brow can normally be corrected in one visit.



Blue Brow Correction - These require an orange colour correction. The additional orange added to the brown pigment results in a neutral outcome of brown. The same principles are needed in mauve correction. This colour correction is often needed as a result of the pigment being placed too deeply into the hypodermis.



Red/Orange Brow Correction - If you are faced with an intense red or orange brow as a colour correction consideration needs to be given as to how you approach this. An opaque pistachio corrector will result in the healed result of brown. The aim is to deliver an opaque coating that covers the existing colour.

When applied the colour can alarm a client, it does however settle into the skin as if never applied. You then choose or mix a colour from our existing range to implant the desired colour. This colour should allow you to correct in one visit.



Violet Brow Correction - Correcting an aged brown eyebrow colour that now shows signs of violet (cool), you would use a yellow with a bias towards orange to correct it. As discussed, yellow is the complimentary color to violet. Orange is warm, so you would need an orange-tinged yellow (not a neutral yellow or a cool green based yellow) to offset the coolness of the violet.

Note: Due to the lack of density of the colour yellow, you will most likely not be able to correct the colour in only one session unless it was quite faded.



Green Brows - This colour would pose many questions; will an attempt at correction provoke an allergic reaction? What ingredients are in this colour? Are they carcinogenic and/or toxic?

As strange as it sounds, unethical manufacturers may use soot from the rubber industry as an additive to their pigment range. This can result in a green eyebrow. This would clearly be an incredibly unethical and dangerous product to use. Black soot from combustion (gum/tyres) will pull in blue and greens because they are full of impurities (polycyclic aromatic hydrocarbons). A green corrective eyebrow would be indicative of a poor quality product.

It is always good professional practice to have the MSDS sheets from your pigment manufacturer. Substances used by un reputable manufacturers can include;

Cinnabar (Mercury) = Red

Cadmium Sulphide = Yellow

These substances are banned in the EU and the USA but regulation of pigments is virtually non-existent. There is, currently, no harmonised standard for tattoo pigments and some are repackaged industrial dyes.

It's not only the colourant itself, there is also concern about some of the carrier liquids that are used to keep the pigment evenly distributed during application and preservatives that are added to inhibit the growth of pathogens. The safest policy is to source quality pigments from a reputable manufacturer. You can also be confident that the product has been manufactured to accepted standards of cleanliness.

Sometimes there are slight differences in colour between one eyebrow and the other. This is normally the result of the pigment being implanted at different levels in the skin.

Most practitioners new to microblading find one eye easier to apply to than the other. This sometimes results in differing degrees of pressure on each eye, resulting in different depths of stroke. The healed results in one eyebrow being less effective. The danger when starting out is applying too much pressure. We only want to implant the colour into the top part of the dermal layer, at the papillary-recticular junction. If we deposit the pigment any lower, the end result will be pooling of the colour and a loss of line definition that is almost impossible to fully correct.

If the pigment is implanted too shallow, it will fade quickly and will need to be reimplanted but that is a much safer outcome as there will be no lasting bad effect.

CHOOSING PIGMENTS

Without experience, it can be difficult to judge the healed result of your pigment choice. It will be some time before the brow attains it's final colour and it may go through several changes along the way. Going from dark to light and then darkening again.

This is where knowing your colour theory and trusting in the principles that you were taught become important. There are four important variables when selecting the right pigment:

- **The Client's Preference.** - It's the client that has to live with the results of your colour choice. If you disagree strongly, politely explain your reasons and agree that corrective measures will be at her expense.
- **Skin Tone.** - The client's skin tone and undertones will be a major factor in pigment colour selection. This subject is discussed in the following chapter.
- **Existing Eyebrow Colour.** - For a natural look, you should attempt to make the result of your hairstrokes as close as possible to the client's natural eyebrow hairs.

- **Pre Existing Pigment Colour.** - If the client has had any previous colour implanted, this must be taken into account in the treatment. Faded or discoloured pigment may need extensive correction before new treatment can begin.

We strongly suggest that you use pigments that are designed specifically for microblading. While traditional permanent makeup pigments will usually work, microblading pigments have a consistency, colour density and particle size designed for the treatment. This is important to ensure a stable, predictable outcome.

The Dermagraph® pigment colour range has taken Europe's top colour chemists years to develop. The goal was to produce a range that would suit every common skin type and be stable enough to last the life of the treatment while excluding harmful side effects. It's a challenge for any fledgling technician to mix a pigment that looks as good on the palette as it does under the skin. We recommend that, apart from exceptional circumstances or for correction purposes, that you use the trusted Dermagraph® calibrated pigment range for the best results.

ORGANIC vs INORGANIC

When used to describe pigments, the terms 'organic' and 'inorganic' are often used by manufacturers to describe their products.

If you're used to hearing these terms used to describe food, you'd expect organic pigments to be healthy or natural in some way, right?

Not so, when used to describe pigments these terms are used in their chemical sense i.e. an organic compound is simply one that contains carbon as part of it's structure. Organic pigments are rarely found in nature and are chemically synthesised. They tend to have low levels of toxicity and are economical to manufacture so they are becoming more popular. As a general rule, organic pigments tend to fade slightly faster than inorganic but they have good opacity.

In practice the top manufacturers use a mixture of organic and inorganic compounds and select their colours based upon the stability and safety of the product.

For microblading, where the results are semi-permanent, organic pigments have a slight advantage for good opacity and low toxicity. Their tendency to fade slightly quicker is not an issue as, in most cases, they will naturally fall from the skin before fading of the pigment becomes apparent.

More important is the quality, micron size and density of the pigment particles.

COLOUR THEORY SUMMARY

As you have discovered, colour theory can be complex and, at times, confusing. The rules change depending upon how you're using and seeing the colour and no one can even be sure that the colour we see is the same as that seen by other people. Colour is, however, important to any beauty treatment and even more so when the results are long lasting and the goal is a natural effect.

Here is a summary of some of the key points that we have covered.

- Additive Colour is the colour of light that is projected.
- Subtractive Colour is the colour of light that is reflected.
- Additive and Subtractive Colour have different rules.
- In Permanent Cosmetic Colour Theory (PCCT) we use the rules of Subtractive Colour.
- There are three subtractive primary colours: Yellow, Blue and Red, that can't be made by mixing other colours together.
- There are three subtractive secondary colours; Orange, Violet and Green. made by mixing the primary colours together.
- If we arrange the colours in a circle, we create what is known as a Colour Wheel.
- The Colour Wheel is a tool that helps us to establish relationships between colours and group them by their characteristics.
- The colours on one side of the colour wheel, from Yellow/Green, through Orange to Red/Violet are classed as warm colours. The colours on the other side of the wheel are classed as cool.
- Colours opposite each other on the colour wheel are known as complementary colours.
- Complementary colours neutralise each other, if the mixed colours are the exact complement of each other, they will mix to grey but, due to the accuracy needed, the result will usually be a neutral brown.
- In Permanent Cosmetics, the primary colours have different strengths when mixed:

1 Drop of Blue = 2 Drops of Red = 3 Drops of Yellow

- When choosing colours, we must not only consider the colour of the pigment but colours present in the client's skin in order to predict the healed result.

PIGMENT + UNDERTONE = HEALED RESULT

- As we only see the colour that is reflected from the skin, lighting is crucial to the accurate perception of that colour.



SKIN TYPE & TONE



KEYWORDS

FITZPATRICK SCALE: A way of categorising skin types according to their response to UV light.

UNDERTONE: the dominant primary hue beneath the surface colour of the skin.

HYPOPIGMENTATION: reduced melanin production in response to inflammation, lightening the skin.

HYPERPIGMENTATION: increased melanin production in response to inflammation, darkening the skin.

KELOID: A tough heaped-up scar forming a ridge or lump above the surface of the skin.

MELANIN: A natural pigment responsible for brown skin colouration.

SKIN TYPES & TONES

When assessing a new client for treatment, her skin type and tone will be the greatest influence on your selection of pigment. Skin types are determined by genetic factors and ethnicity. Skin tone is the base colour or undertone of the skin.

The skin type will determine characteristics such as tanning in response to UV light, dryness or sensitivity and the complexion or outer colour of the skin. Skin tone may be influenced but not dictated by skin type. In other words, we can use skin type as a signpost to finding a client's skin tone but not everyone with a particular skin type have the same skin tone. Skin type will also be a factor in the successful outcome of the treatment.

As artists painting within the living canvas of the skin it is vital to understand how the colours in the skin will affect the colours that we choose, and the type of skin affect treatment.

Skin Types

To help us determine and assess skin types, we refer to the universally recognized Fitzpatrick Scale. The Fitzpatrick scale is a numerical classification scheme for human skin colour. It was developed in 1975 by Thomas B Fitzpatrick, an eminent Harvard dermatologist, as a way to estimate the response to different skin types to ultra violet light.

The Fitzpatrick Scale groups skin characteristics into six types

Skin Type 1 - Scandinavian, Celtic

This skin type is very sensitive. It tends to have more freckles and it can get sunburned very quickly. Type 1 skin is very sensitive to sun and easily burns. Blisters and skin peeling can also occur as a result of over exposure to the sun.

- **Eyes:** light blue, light grey or green
- **Natural Hair Colour:** red or blonde
- **Original Skin Colour:** Pale, of porcelain appearance, white with tones of red.

Skin Type 2 - Scandinavian & Northern European.

This type of skin is also prone to freckles, is very sensitive to UV light and easily burns. Blisters and skin peeling occur as a result of over exposure to the sun.

- **Eyes:** Blue, Grey, Green
- **Natural Hair Colour:** Blonde
- **Original Skin Colour:** Light skin, pale with a very slight beige tone.

Skin Type 3 - Central & Northern European

A little sensitive to sunlight, sometimes present with some freckles, this skin type will occasionally get sunburnt. People with type 3 skin will achieve a tan easier than skin types 1 & 2 and will acquire a light sun tan.

- **Eyes:** Blue
- **Natural Hair Colour:** Dark Blonde or light brown.
- **Original Skin Colour:** Fair skin with a beige, olive or pink undertone.

Skin Type 4 - Mediterranean, Southern European, South American.

This skin type, rarely gets sunburnt and typically will go to a medium brown colour with sun exposure.

- **Eyes:** Dark Brown
- **Natural Hair Colour:** Dark Brown or light Brown
- **Original Skin Colour:** Light brown skin with, olive, yellow or blue skin tones.

Skin Type 5 - Asian, Middle Eastern

This skin type is not sensitive to sunlight, rarely gets sunburnt and develops a suntan easily.

- **Eyes:** Dark Brown
- **Natural Hair Colour:** Dark brown or black
- **Original Skin Colour:** Brown, dark brown with a hint of olive or yellow.

Skin Type 6 - African, South Asian

This skin is pigmented very deeply and as a result never experience sunburn.

- **Eyes:** Dark Brown
- **Natural Hair Colour:** Dark Brown or Black.
- **Original Skin Colour:** Brown, dark brown with a hint of olive or yellow.

Additional information on the Fitzpatrick Scale

Skin Type 1	White skin sunburns easily, doesn't tan.
Skin Type 2	White, sunburns but capable of tanning
Skin Type 3	Light, tans evenly - can hyperpigment
Skin Type 4	Medium, tans evenly - prone to hyperpigmentation
Skin Type 5	Dark, tans, hardly ever burns - prone to hyperpigmentation
Skin Type 6	Very Dark, never burns - prone to hyperpigmentation

Hyperpigmentation

This is a relatively common skin condition where dark patches of skin appear due to overproduction of melanin. They can be light to dark brown in colour. Hyperpigmentation can appear as a response to trauma so scars will heal darker than the surrounding skin. It can also appear as patches due to UV exposure, hormonal changes such as pregnancy or even heat.

It is unusual to see hyperpigmentation in light skin, Fitzpatrick Types 1 and 2.

Hypopigmentation

Is the loss of pigment in some areas of the body showing lighter patches of skin.

There is evidence to support that some clients are genetically predisposed, either to weak melanocytes and respond to inflammation by decreasing melanin, whilst others over produce melanin resulting in hyperpigmentation.

Skin Response to Trauma.

We need to be aware that Fitzpatrick skin types 3-6 hold a higher risk of developing, Post Inflammatory Hyperpigmentation (PIH) and also hold a higher risk of keloid scarring. Keloids are scars that rise abruptly above the surface of the skin forming a ridge or lump. It is therefore important to be able to assess and evaluate whether it is safe to proceed on this basis.

Experienced SPMU artists report that Fitzpatrick skin types 3-6 appear to tolerate the invasive procedure better. This is in general due to the skin appearing thicker. Fitzpatrick skin types 1-2 appear to have thinner skin and may require a different degree of pressure, initially your pressure should be relatively light to ensure that you do not go too deep.

Fitzpatrick skin types 5 & 6 have 60%-70% higher lipid (fatty acid) content than skin types 1-3, this is due to black skin having larger sebaceous glands.



“ A layer of cells in black skin, although thinner, has a higher concentration of cells than white skin. Because the Stratum corneum is denser in black skin, and the oil glands are larger, black skin is much more prone to a lesion formation through follicle impaction” (*Christine Heatherman Acne & Skin of Colour, Dermascope 2003*).

It would be strongly advisable for new or novice SPMU artists to proceed with caution when working on Fitzpatrick skin types 5 & 6. Selecting a pigment can also be quite daunting for the newly trained SPMU artist, when the client returns for her infill it is not uncommon for your client to have developed PIH and the hyperpigmentation will have caused the original pigment that you have implanted to have completely changed colour. It will appear much darker as a result of hyperpigmentation. This can take weeks even months to return to normal.

It is always a good idea to look at the knees and elbows of Fitzpatrick skin types 3-6. If they appear darker due to friction or trauma, it is a good indicator of how your client's skin will behave when it has been compromised. This is not an exact science, however it is a good indicator that additional melanin is being produced during the healing process.

The same can be deduced from looking at insect bites and acne scarring. All of these points are indicators for pigment choice, should you feel that you have gained enough experience to proceed with the treatment.

Modifications to implanted pigment can be made on a follow up , they will however make the eyebrow appear larger, darker or both. It is therefore recommended that less is done on the initial appointment to ensure that modifications can be made to the eyebrow without completely altering the appearance of the finished look.

It is really important to wait 8-10 weeks after the initial procedure before making any color adjustments. We could wrongly read PIH as colour discoloration and as a result make unnecessary colour adjustments. Remember;

PIGMENT + SKIN TONE = HEALED RESULT.

Clients with Fitzpatrick skin types 3-6 who give indications that they may be prone to hyperpigmentation, it is always better to be cautious and not to go too dark on colour selection.

When you're starting out and building your reputation, you should accept that you may have to adjust the density of your client's colour in a further treatment. It is a relatively simple process to make the brows darker but not to lighten them.

If our client is a Fitzpatrick skin type 5 or 6, it may not be an option to use a much lighter colour as it may not register against the dark tones of the skin.

It is important that we are able to understand all the risks in terms of the final colour and the role that hyperpigmentation plays in the final outcome. The darker the skin type we are working on, the more caution we should exercise. Approaching the treatment in a careful and considered manner.



FACTORS DETERMINING SKIN COLOUR

The ability to understand colour is the difference between a mediocre technician and an excellent Semi Permanent make up artist. For a newly qualified technician it can be very difficult to identify a client's skin tone and skin type.

What actually gives skin its colour?

- **Melanin:** These brown pigments are responsible for most of the visible skin colour. They are produced in the lowest layer of the Epidermis, the Basal Layer
- **Carotene:** Yellow-coloured pigments which can be found in the top layer of our skin.
- **Haemoglobin:** An iron containing protein responsible for oxygen and carbon dioxide transport in red blood cells. If the client's veins or blood vessels look red, this would indicate that the blood supply is oxygenated. If they appear blue, this would suggest that they are deoxygenated.

Melanin

Melanin is produced by cells called Melanosomes in the bottom layer of the skin's Epidermis. Melanin production is stimulated by the pituitary hormone called melanocyte stimulating hormone (MSH). Its primary purpose in the skin is to protect against UV radiation from the sun. It is also found in hair and the iris of the eye.

Melanin is a complex of lighter, red/yellow pheo-melanin and darker, brown/black eu-melanin. The balance between eu- and pheo-melanin is a key factor in determining skin colour as well as the amount, shape and size of the melanin carrying cells. Different skin types vary in the type and quantity of melanin that they are able to produce. Black skin produces 3-6 times more melanin than white skin and the type of melanin that it makes is twice as effective (*Gloster & Neal, 2006*).

Pigment will interact with the client's natural skin tone/type which will result in a change of colour from the pigment colour in the bottle.

It is therefore absolutely essential that we conduct a client consultation in conjunction with a patch test and client consent form. We then agree the colour with the client prior to application.

THE EFFECTS OF SKIN TYPE AND TONE ON IMPLANTED COLOUR.

Primary colours - Red, Blue, Yellow.

Primary colours can be found in human skin in the form of pigmentation of the skin, i.e melanin, carotene and haemoglobin. Once we have determined the undertone and which primary colour is more visible, we balance this in the selection of pigments used. By this I mean we create balance by adding pigments which contain the colours that are missing from the clients natural skin.

For a natural and pleasing result we need to balance the three primary colours. Adding more of a colour that is already dominant in the skin makes the resulting colour too vibrant and unnatural. If we cannot find the perfect pigment we would need to mix or modify it ourselves, being careful to record how many drops from each shade we are using on the client record card. This gives us an invaluable reference to the pigments we have previously used in any further treatment or correction work

Red Skin in Warm Tones.

More often than not we see this scenario in Fitzpatrick skin types 1 and 2, occasionally we will see it in skin type 3. In this skin type, the predominance of haemoglobin red, overwhelms the other primary colours, yellow and blue. The red appearance is often misinterpreted by the novice technician as a warm undertone, if we use a cold brown pigment with a cold undertone, the healed result potentially is a greyish-violet. In this instance the blue-cold pigment blending with the misread natural red pigment blend together and result in violet.

Conclusion

Green is the complementary colour on the colour wheel for red. If a client has a reddish perceived warm skin tone, we would use a brown pigment with a substantial yellow or yellow green base. If there is a cool red skin tone we would use a warm pigment e.g. one with a yellow/orange base.

Yellow is, relatively, the weakest coloured pigment, so you should take this into account in your colour selection.

Blue Skin in Cold Tones

The appearance of blue toned skin, this skin tone is mostly seen in Fitzpatrick 1 and 2 skin types i.e. people with pale skin. The red and yellow pigment content in the skin is extremely low. We therefore need to look at the opposite of blue on the colour wheel, which is orange. We would therefore choose a pigment that has more of an orange base.

Conclusion

We know that orange is the opposite to blue on the colour wheel. We should use a reddish brown pigment with a couple of drops of yellow to compensate for the bluish tone. We need to ensure that we restore balance between the cold and warm tones.

Green Tones

We can ascertain that green tones are most commonly seen in Fitzpatrick skin types 4 and 5. The olive he indicates a greenish brown colour. This is a fairly safe indication that it lacks red pigment, so we need to add a pigment with more of a red base. A cold brown pigment has a high risk of turning grey or have an ashy discolouration. In this client group we need to have an end result of chocolate brown. We achieve this by mixing a warm brown or a pigment with more of a red base.

Conclusion

The complementary colour for green is red. A red/brown could be warmed up with one or two drops of yellowish brown.

“ There are many factors that can confuse the untrained eye; sunbeds, sun tanning, skin bleaching, medication, hormonal changes and nutrition, to name but a few. ”

Yellow Tones

These tones are quite often seen in oriental clients or clients from Asian descent. For clients with this skin tone, colour selection is much easier. Consider pigments with a yellow neutral base. If we used a cold toned pigment it may result in the healed brow appearing ashy. If we use a warm toned mixture we will normally get a chocolate brown shade result.

Conclusion

In the instance of a client with yellow or sallow based undertones as part of the client consultation determine whether they would prefer a chocolate brown or ash base outcome.

Black Tones

This is skin type 6 on the Fitzpatrick scale. The two extremes in the Fitzpatrick scale; 1 and 6, are regarded as cool skin tones.

For black skin we should always recommend a black pigment with a small amount of reddish/brown and yellow.

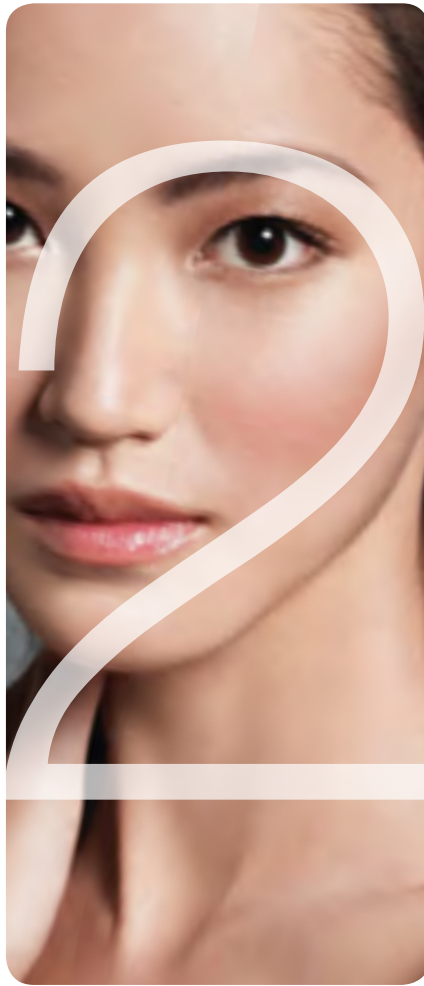
Conclusion

By mixing reddish/brown and yellow to the black we try to preserve the colour intensity and prevent it from healing to a slightly grey or blue outcome. You could also try a yellow orange base to warm up the pigment colour.



FITZPATRICK

The most commonly used method for classifying a person's skintype by their response to sun exposure in terms of the degree of burning and



PALE WHITE

Always burns.
Never tans.



WHITE

Burns easily.
Tans minimally.

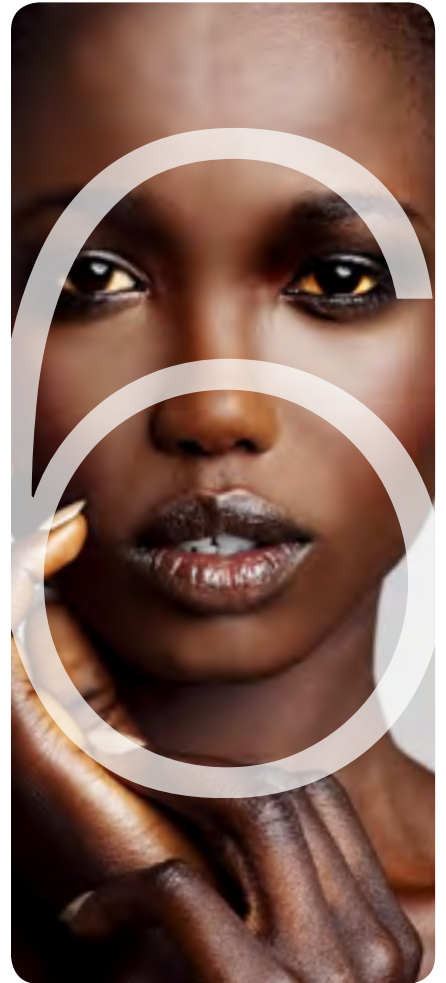


LIGHT BROWN

Burns moderately.
Tans evenly.

SKIN TYPE

tanning is the Fitzpatrick scale. Developed by American Dermatologist Robert Fitzpatrick.



MEDIUM BROWN

Burns minimally.
Tans well.



DARK BROWN

Rarely burns.
Tans profusely.



BLACK

Never burns.

FITZPATRICK SKIN TYPE

Answer these questions to determine your client's skin type.

EYE COLOR

- 0. Light brown
- 1. Blue, Grey or Green
- 2. Dark
- 3. Brown
- 4. Black

NATURAL HAIR COLOR

- 0. Sandy red
- 1. Blonde
- 2. Chestnut or dark blonde
- 3. Brown
- 4. Black

SKIN COLOUR (unexposed)

- 0. Unexposed skin
- 1. Pale
- 2. Beige or olive
- 3. Brown
- 4. Dark brown

DO YOU HAVE FRECKLES?

- 0. Many
- 1. Several
- 2. Few
- 3. Rare
- 4. None

IF YOU STAY IN THE SUN TOO LONG?

- 0. Painful blisters, swelling
- 1. Mild blisters, peeling
- 2. Burn, mild peeling
- 3. Rare
- 4. No burning

DO YOU TURN BROWN?

- 0. Never
- 1. Seldom
- 2. Sometimes
- 3. Often
- 4. Always

HOW BROWN DO YOU GET?

- 0. Never
- 1. Light tan
- 2. Medium tan
- 3. Dark tan
- 4. Deep dark

IS YOUR FACE SENSITIVE TO THE SUN?

- 0. Very sensitive
- 1. Sensitive
- 2. Sometimes
- 3. Resistant
- 4. Never have a problem.

HOW OFTEN DO YOU TAN?

- 0. Never
- 1. Seldom
- 2. Sometimes
- 3. Often
- 4. Always

LAST TIME YOU BURNT?

- 0. +3 months ago
- 1. 2-3 months ago
- 2. 1-2 months ago
- 3. Weeks ago
- 4. Days

KNOW THE SCORE

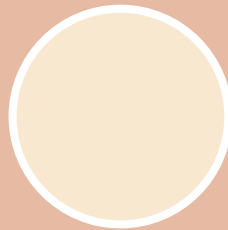
Answer these questions to determine your client's skin type.

0-6



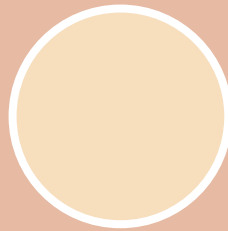
PALE
WHITE

7-13



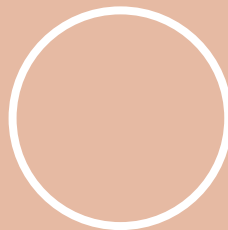
WHITE

14-20



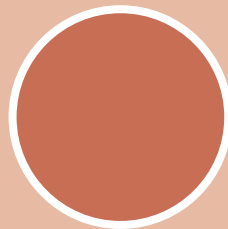
LIGHT
BROWN

21-27



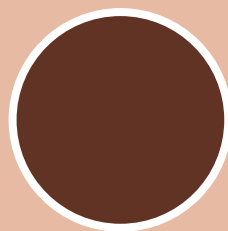
MEDIUM
BROWN

28-34



DARK
BROWN

35+



BLACK

SKIN UNDERTONES

The concept of skin undertone is a much discussed (and often misunderstood) element of permanent cosmetics. Why? Identifying the client's skin undertones (cool or warm) is often complicated by ethnicity and sun exposure.

All skin is translucent to some degree, this is more obvious on very light coloured skin as we can often see structures such as blood vessels beneath it but even the colour of very dark skin is made up of more than just the colour of the surface layer. As we are implanting colour, the dominant hue of the skin beneath the surface, known as skin undertone, will need to be taken into account when selecting pigment. Our goal is to be able to select a pigment with the appropriate base colours, in order that, once healed, the implanted colour appears as anticipated on the client's skin.

“ If it is difficult to identify the skin undertone, knowing the Fitzpatrick skin type of your client will help you make an informed choice. ”

There are many factors which influence how the naked eye perceives skin undertones, so being mindful of them will enable you to avoid 'false readings', with the objective of avoiding discoloration months later.

As an example, people with darker (Fitzpatrick 3-5) skin may tan to a golden bronze (warm) colour, when in reality they have olive (cool) skin undertones. Intentional tanning may also cause translucent or transparent skin types to appear warm, when in reality their skin has blue or violet skin undertones.

This light contains all the colours of the spectrum in roughly equal proportions so it will render reflected colours accurately.

Of course, it's not always possible to make an assessment of colour under perfect natural light, even daylight changes in early morning and late afternoon, so it's important to obtain a good lamp with a 'daylight' bulb. Different light bulbs produce a different quality of 'white' light. Imagine the green-tinged light emitted from a supermarket fluorescent light bulb, as opposed to the warm amber hue of a halogen light bulb, and compare

“ We've all seen the dreaded 'blue brow' or 'red brow'. This isn't usually a problem with the pigments themselves, but a misunderstanding of color theory or misreading of the client's skin undertone. ”

LIGHTING

Lighting is a major factor in the accurate perception of skin undertones. Remember, the hues we're dealing with are subject to the rules of subtractive colour. We only see the colours of light that are reflected from the skin minus those that have been blocked or absorbed. To see the colours accurately we must ensure that the light that's shining on it contains as much of a balanced spectrum of white light as possible as our eyes will try to adjust and compensate for the missing hues.

The purest, most balanced form of white light is 'daylight' which is defined as a mixture of sun and sky light from mid-morning to mid-afternoon.

them to natural daylight. All the light bulbs in the picture opposite are called "white" but it's only when seen side by side that we can see the difference in the colour reflected from the surface of the white wall.

If you took the same skin, and examined its skin tone under all these light sources, the skin colour would appear differently under each separate light source.

For consistency, it is important to examine the skin colour temperature of all clients in your treatment space, under the same good quality (Colour Rendering Index above 80) light source so as to account for these differences.

EYEBROW COLOUR SELECTION

Within permanent cosmetics, eyebrow colour selection is considered particularly challenging.

Why? Beyond the influence of skin undertones, there is the issue of matching colour to the natural eyebrow hairs and at times, hair colour. These are additionally influenced by what the client has been applying for years with her eyebrow pencil (which you, as a technician may not necessarily agree with, but must be prepared to factor it into your pigment of choice).

With all the myriad of colours available for cosmetics, it is a good indication of a client's preference for colour temperature (warm or cool) and intensity (light or dark). Although it is important to note that makeup applied on top of the skin appears differently to how a similar colour pigments would appear when implanted beneath the skin. It is still a good starting point in narrowing your pigment selection for your client.

This is why it benefits SPMU artists to have a good understanding of colour theory. You can make accurate colour choices more often and explain the scientific basis of your choice to the client, if she disagrees. If problems arise (nobody's perfect), the client will be more confident that you have the knowledge and expertise to solve them.

If you go on to do further research on colour theory, you should note the ways in which traditional colour theory and permanent cosmetic colour theory (PCCT) differ.

Canvas. Traditional colour theory (TCT) is usually displayed on white paper (a blank canvas, with no natural colour of its own). PCCT is different, in that colour is being introduced / mixed with a canvas that already has colour.

Variation. Over time, new skin covers the selected pigment used, which over time will influence how the colour appears in the skin when healed. The most common problems concerning colour choice arise when novice (or poorly trained) technicians make the mistake of applying a warm eyebrow pigment to a person with a strong, warm skin undertone and/or a cool eyebrow pigment to a person with a strong cool skin undertone. They don't consider the influence of the colour of skin undertones that would ultimately contribute to the colour when healed.

Experience will be a massive help in choosing the right pigment for your client but even the most experienced PMU artist will misread a skin tone every once in a while. Take time to read the colours in the skin, examine it in different lighting conditions and; if still in doubt, go a shade or two lighter, accepting that you can perform an additional corrective treatment when the colour has settled in the healed skin.



SKIN TONE EXAMPLES

Determining a specific skin tone is not easy. In our 21st Century, multicultural world you are much more likely to encounter clients with differing skin types and it has grown more challenging to identify them with the naked eye. Training your eye to look beyond the initial appearance will take practice.

Here are some common skin types and tones that you may see coming through the door of your salon. We've given you some guidance to help group them into warm or cool undertones. Unfortunately, not all of your clients will fit neatly into these tone brackets so please check and double check before classifying the skin tone of a new client.



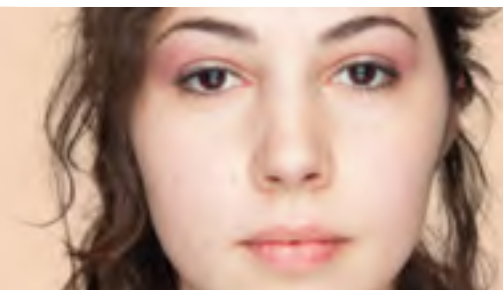
TRANSPARENT COOL

- **Skin** Will appear a cool porcelain with a violet influence around the eyes - although this is more obvious when the client has lighter skin.
- **Hair** The natural hair of transparent types may appear darker shades of ash brown or soft ash grey. Women with transparent skin types will often add red or golden highlights.
- **Eyes** Usually light blue, grey or green.

COLOUR SELECTION

If you detect a violet undertone, yellow is the complementary colour to violet on the colour wheel. So as to avoid a healed eyebrow with too cool a shade, the pigment selection should have a predominantly yellow base.

TRANSLUCENT COOL



- **Skin** Most often presents as a cool ivory, and with slight blue influence around the eyes where the skin is at its thinnest. Easier to detect in people with lighter skin.
- **Lips** Lips can appear as a pinkish lavender colour.
- **Hair** Individuals with this skin type can present with fine but very dark hair. Early onset of greying is common in people with this skin type, turning a snow white colour.
- **Eyes** Usually light or hazel but can also be dark brown.

COLOUR SELECTION

Orange is the warm complimentary colour to cool blue on the colour wheel. To avoid a blue or grey (cool) healed eyebrow, the pigment selection should contain orange in the base. Take note of the natural hair colour as people with this skin type often have very dark but fine brown hair.

Special Tips for Transparent and Translucent skin types.

Both transparent and translucent skin types present more often on mature clients with lighter porcelain, ivory skin undertones and they often have white, silver or grey hair.

These clients may specifically request a grey or ash brown eyebrow, due to the fact it matches their scalp hair. To achieve this there are two options:

- A lighter ash brown containing yellow is recommended, as translucent types with a strong violet or blue undertone may turn the eyebrow pigment too dark upon healing.
- If this isn't in your range of available pigments, a similar effect can be achieved by adding a few drops of a warm yellow colour to your ash brown colour.



Not to be confused with the traditional cosmetic industry's classification of rose as warm. This is based on how it appears (topically) on the skin, not how the pigment interacts with skin when tattooed, which is our area of focus. For the purposes of permanent cosmetics, skin undertone evaluation of skin types with pink or red undertones is usually cool.

Red or pink undertones can also be affected by environmental, health or dietary factors as well as aging, where the closeness of the capillary bed (blood vessels) to the surface make the skin appear flushed or rosy, especially above ridges in the bones such as the top of the cheeks and brow bone.

- **Skin** Has a rose-beige, soft pink or red-violet colour to the skin. Other telltale signs People who flush easily or who have red ears, or neck / upper chest region. You can also look for broken red capillaries (small veins) near the surface of the skin.
- **Eyes** Often gray, gray-blue, blue-green.
- **Hair** Golden blonde, strawberry blonde, reddish brown or may appear as a copper colour in younger clients. When losing its colour, it often presents as a graphite or dull tone. Upon greying, the hair appears as a dull/yellowish grey as opposed to brilliant white.
- **Lips** Lips present as having a purple or lavender colouring to them.

COLOUR SELECTION

Because of the coolness of some rose skin tones, eyebrow pigments with a golden brown base are recommended.

Use an eyebrow pigment with a yellow-orange or orange base, the amount of which should vary depending on the coolness of the skin.

OLIVE COOL



The olive skin tone is one of the easiest to spot and found in Mediterranean, Hispanic, Latin, South American and South Asian ethnic groups. Olive skin can also influence the skin undertone in those with a multi-ethnic ancestry across Europe and America.

- **Skin** - Yellow brown, golden bronze or olive. Rich skin tones with subtle green undertone.
- **Eyes** - Often dark.
- **Hair** - Often dark brown/brunette.

Colour Selection

Red is the complimentary colour to green. However, many reds have transparent properties meaning orange (red + yellow) can be substituted as a complementary colour to green. We would recommend considering eyebrow pigments with orange in the base.

SALLOW NEUTRAL



Neutral skin tones are prevalent in East Asian, Oriental ethnicity but be aware that sallow tones can be an indicator of an underlying health condition, anaemia, smoking or a vitamin deficiency.

- **Skin** - This is a common (Oriental) skin type. Pale yellow or ivory (more neutral) undertones without the olive tinge of the Mediterranean skin. If there is a greenish cast, it will present as a yellow-green. Typically, no blue or red casts are evident.
- **Eyes** - Typically dark.
- **Hair** - Medium brown, golden blonde, mousy brown/blonde, warm gray to black.

Colour Selection

Stay neutral in your selection of pigment for this type of skin. The complementary colour to yellow is violet. But, contrary to traditional colour theory we would not recommend using it as violet is a combination of blue and red, which are much stronger colours than the sallow skin undertone. Even a tiny amount of blue will overpower a neutral undertone and become the dominant shade.

Instead, consider eyebrow pigments with a yellow (more neutral base). Yellow can be both warm and cool, and is more neutral than the cool (green or black) or warm (orange or red) based pigments.

BROWN COOL



Found in Middle Eastern, Southern European or people with multiple ethnicity. Probably the most difficult type of skin to determine an undertone. People with brown skin tan easily and this will mask the underlying skin tissue. It can be difficult to distinguish between olive and brown but a good pointer is to look at the veins in the wrist, if they have a slight green tint you can almost certainly classify as olive.

- **Skin** - Brown skin has some degree of cool undertones, the degree of which varies.
- **Eyes** - Normally dark.
- **Hair** - Colouring is normally dark brown, or black.

Colour Selection

If you cannot determine the undertone of the skin, consider that many of these skin types tend to result in a cooler colour pigment upon healing. Consider using a pigment with a warmer yellow or orange base. Often, you will need to schedule a follow up treatment in order to have a truer evaluation of undertones of the skin, based on its reaction with the initial procedure and some adjustments may need to be made to the colour.



BLACK OR WHITE VERY COOL

You will often find these skin types easier to determine, and comprise the opposite ends of the colour spectrum, in terms of outward (initial appearance). Extremes are always cool.

This skin type ordinarily refers to African or South Asian (very black) or those of Scottish, Welsh or Irish Celtic ancestry (extremely pale).

Colour Selection

Consider using pigments that have orange or yellow-orange in the base. Adjustments may be required during a follow-up visit.

Special Considerations for Black Skin

In order for eyebrows to show up on black skin a darker eyebrow pigment is required. Darker = cooler, either containing green or black (or both) for darkening. To add warmth a few options are available:

- Adding an independent red/orange iron oxide pigment to offset the coolness of dark eyebrow pigments.
- Apply a warm brown at the initial session and once healed, apply either black, black-brown or brown-black (as appropriate) to darken the eyebrow upon follow-up.

ALTERNATIVE SKIN TYPE GROUPING

Independent of UV response or ethnicity, we can also categorise skin by the balance of liquids present in and on the skin i.e. how dry or oily it is. The skin needs these substances to stay supple and soft but the balance of fluids varies; depending upon genetic, hormonal, dietary and environmental factors.

We can group these skin variants into four categories:

Dry Skin

Dry skin is often pink-yellowish in colour, it is normally quite thin with small pores and is prone to flaking. The disadvantages of this skin type are;

The healing process is normally accompanied by lots of scales and prolonged peeling. This type of skin requires a cautious approach, it is prone to becoming itchy, irritated or inflamed. It is normally quite sensitive and can be a symptom of some chronic skin conditions, ask your client to get a sign-off from her doctor if you think it is possible that treatment would be inadvisable.

Pay close attention to the results of the patch test and monitor for contra-action. Post procedure after care is very important to minimize peeling and irritation.

Normal Skin

This type of skin is not too dry and not too oily. Pores are small, in some instances barely visible. This skin type is not prone to sensitivity which, therefore, makes it a good candidate for semi permanent make up.

Oily Skin

This skin type is prevalent in younger people, often triggered by hormonal changes during puberty. It can also be brought on by stress or even as a side effect of antibiotics. Around 10% of the population has this skin type. It appears yellow-gray or an earthy colour, it also has a shiny, oily appearance and has a tendency to blackheads, spots and blemishes.

This skin type is the most difficult to work with, there is a poor absorption of the pigment, it normally acquires a cool tone after healing and the pigment has a tendency to fade. The lines and contours are often uneven and blurred. Healing skin can sometimes be accompanied by festering pimples and acne. If your client has this type of skin, she should be advised that the treatment is less likely to achieve the best result.

Combined Skin

Combined skin type has both normal and oily sections to the skin surface. The forehead, nose and chin area (known as the T-Zone) can appear oily while the rest of the face has the characteristics of normal skin. It is therefore quite normal to see an oily forehead in this skin type and we should approach with the same caution that we would use if we are applying to oily skin.



Pantone® Skin Colour Guide

FINAL POINTS

Adjustments

It is always easier to warm up a new (i.e. recently tattooed) cooler eyebrow at the follow-up appointment than it is to cool down a warmer eyebrow colour without going too far. A colour correction on an aged eyebrow that bears a strong blue or gray (cool) colour is more difficult to warm up. As such, it is wise to have a range of correction pigments on hand.

Very warm or very cool eyebrow pigments are more difficult to adjust to another colour temperature. We provide eyebrow pigment colours which are more neutral (i.e. warm or cool yellow) to help you avoid extreme eyebrow colour problems which prove difficult to correct. Until you have gained extensive colour mixing experience, you should try to avoid using red or blue primary pigments to make colour adjustments. They are just too strong to mix in the quantities that you will be using. Yellow bases, yellow-green (cool neutral) and yellow orange (warm neutral) pigments are usually your safest option.

Ageing

Age affects permanent eyebrow colour. Principally, this is due to the thickening of the Epidermis and the thinning of the Dermis, often resulting in increased visibility of blood capillaries and a rosey appearance of skin undertone.

Depending on how many colour adjustments an eyebrow client may have during her life, colour adjustments may need to be conducted. Your client may have had previous cosmetic tattoo treatments using older style pigments that may have discoloured or bled into the Dermis. Look very closely for traces of pigment affecting the natural undertone and take correction of these colours into account when making your pigment selection. Several appointments may be necessary for correction of badly discoloured brows. Warn your client of this before commencing the corrective treatment.

Health Factors

Health and environmental factors can influence the perceived skin tone along with dietary, hormonal activity and factors such as smoking and drinking. This influence can be temporary or affect the skin in the long term. Ask your client if they have noticed any change in their skin over time. A yellow skin tone can indicate a potentially serious chronic condition. We are not trained to diagnose medical conditions and we must take care not to alarm clients but it is responsible practice to suggest that a client consults their doctor if we discover something unusual in their skin tone. Maybe by suggesting that they check for a vitamin deficiency and letting their health professional check that everything is okay.

Electronic Measurement of Skin Tone

You may have seen the Pantone® Capsure skin measurement device which is in use at some high street retailers and salons. It measures skin tone and matches it to the Pantone® SkinTone™ system colour swatches to aid in the selection of makeup products. The Pantone® SkinTone™ system has 110 different skintone hues and can be a useful starting point when assessing a client's skin colour.

Spectrocolorimeters (colour measurement devices) such as the Capsure have a great future as they will standardise colour measurement, independent of lighting and all the other factors that can affect our perception of colour. We think that, right now, these devices should be used with caution as they are biased more towards the surface colour rather than skin undertone. It's tempting to take a reading with the device and then trust it more than our own judgement and experience. It has the potential to complicate the process if the readings are not interpreted correctly.

Research and development is currently taking place to develop a new generation of spectrocolorimeter that can measure undertones via laser but any measurement system will still need to be used with caution. The sample area is likely to be small and interpretation of the results will be key to its accuracy and usefulness.



CONSULTATION

KEYWORDS

CONTRA-INDICATION: A specific situation or condition that would make a treatment or procedure inadvisable.

CONTRA-ACTION: An adverse reaction that occurs during or after treatment.

The Importance of Effective Consultation

Client consultation is as essential for you as it is for your client. It's where you establish a relationship with your client and open up lines of effective communication that ensures she comes away from the treatment as an advocate of your skills and a walking billboard for your services.

The primary objective of the consultation is to look for contra-indications that would make the treatment inadvisable or require a medical sign-off before proceeding to treatment and assess the risk of any potential contra-actions as a result of the treatment. It also gives you the opportunity to gather the information you need in advance of the procedure, and customise treatments specifically for your client.

Not only is this treatment a semi permanent one, but it is also invasive, so the importance of having an effective consultation cannot be stressed highly enough. Not only do your consultations need to be about discovering possible contra-indications and establishing your client's skin tone or preferred brow shape. There should also be a psychological evaluation to make sure your client is going into this with eyes wide open. It is not possible to reverse this treatment without great pains, and even then it may be able to be only corrected or adjusted rather than completely reversed.

Don't take it for granted that your client knows the intricacies of the procedure, explain the risks, the importance of aftercare and the fact that it will take several weeks to see the healed result. If told in advance they will accept that; if they feel some discomfort or see some blood during the treatment, it is nothing to worry about.

When one piece of information is given to multiple people, they can interpret it in a range of different ways. Based on our experiences, current thoughts, and social skills we may at times misinterpret what another person is saying, or colour it with our own take.

Throughout the consultation you should be actively looking for the risk of contra-action. It is important, however, that we do not try to diagnose or give our own interpretation of any medical condition, unless we are qualified to do so. If in doubt, politely request written medical consent from her Doctor.

Suitability for Treatment

The first thing we must establish in a consultation is whether it will actually improve their existing brows, and if the treatment is appropriate for them. We should be aware that not every person is suitable for a permanent makeup treatment. Accepting any client or request just for the work is bad practice, we should get used to carefully fulfilling a suitable clients specific needs, and then let the work speak for itself.

You may be wondering who exactly the right type of client is. Simply put, a suitable client should just want to improve the appearance of his/her eyebrows, fully understand the implications of the treatment process and not be excluded for health or psychological reasons.

Who is the wrong type of client? Pregnant and lactating women, clients with diabetes, clients on blood thinning medication, or people whose skin has been compromised by a health condition should not undergo treatment. See the guidance on your medical questionnaire in the Appendix of this manual.

It's advisable to check for unexplained blisters or rashes, as they could be indicators of a undiagnosed skin condition. Allergies to the properties found in the pigments, as well as makeup in general, should also be cross checked with a patch test to lessen the chance of a contra-action to the treatment. Needless to say, if there is a contra-action to the patch test it is inadvisable to proceed to treatment.

Mental health is another consideration when deciding on who is suitable. Clients with an irrational or overly deprecating view of their self image should be generally excluded from permanent makeup.

Body dysmorphic disorder is a more serious condition where an individual is irrationally concerned with their body image, often blowing imperfections out of proportion, creating great discomfort for themselves. It may be difficult to tell if you're client is affected by any of these problems, so we should ask ourselves instead if we could actually please the client, or will they likely be unsatisfied or nitpick, causing a dispute.

Take notes, document everything, you'll be glad you did on treatment day. Your client must complete a consent form (see appendix), a consultation form, declare contraindications on a medical questionnaire (see appendix) and fill in a client record card. You should also take photographs of your clients existing brows and the patch test.

There is a model informed consent form in the appendix of this manual for your reference.

Client Record Card

You are obliged to record details of your client's treatment and keep them for future reference. Between 2 and 10 years depending upon your licensing authority. Traditionally this has been done on file cards but there are no rules against doing this electronically. However, if you do store your client's information on a computer you will be subject to the Data Protection Act and you must take steps to ensure the security of the data that you are storing. We recommend that you stick with physical records for the time being.

On the record card you should record the treatment, materials e.g. pigments, anaesthetic, blades used and any contra-actions or complications. We also recommend that you note batch numbers of the pigments for future reference.

“ Take notes, document everything. You should also take photos of your clients existing brows and the patch test. ”

Client Consultation Form

On the Client Consultation Form, you should document any information relevant to the treatment and get your client to acknowledge that she has received information about the treatment and completed the consent form and medical/contraindications questionnaire.

Record your client's contact information and that of her Doctor along with details of exactly what treatment you have agreed. Once documented and signed it makes it less likely that a dispute will occur over a misunderstanding about the procedure.

Consent Form

This is a basic legal requirement for any invasive procedure. It outlines the risks of undertaking any such procedure and documents the fact that the client has been made aware of any risks but still consents to proceed with the treatment. Be aware that; by law, you cannot carry out this treatment on anyone under the age of 16 or under the age of 18 without parental supervision. Most insurers will not allow you to treat persons under 18 anyway. If there is any doubt, you must verify the age of your client. Photographic ID such as a passport will eliminate uncertainty.

Contra-Indications and Medical History Questionnaire.

If you ask your client to complete a questionnaire it avoids the risk of her not declaring vital information and saying that she didn't think that a particular medical condition or contra-indication was relevant to the procedure. A standard form it also helps to make sure you don't overlook any of the questions that you should ask before assessing whether a client is suitable for treatment

Not all of the conditions on the questionnaire will preclude a client from treatment but we suggest that you take careful note of our comments on each of the answers that you will find in the appendix of this manual. Some of the conditions and contra-indications will require the client to obtain written medical consent from her doctor or specialist before proceeding. Don't be badgered by your client into disregarding any contra-indications, your reputation, and hence your future business could be on the line. You must also consider the risk of negating insurance by ignoring a contra-indication.

Remember to confirm your client's answers when you come to perform the procedure and ask if any health issues have arisen between the consultation and day of treatment.

Patch Test.

The purpose of a patch test is to rule out contra-action to the any of the products that you will use during the treatment. If your client has answered 'yes' to any of the allergy or sensitivity related questions on the medical form then procede to patch test with caution and with written consent from your client's doctor.

We are aiming to mimic the treatment on a smaller scale, in an inconspicuous area and monitor for contra-action to the treatment. e.g. redness, swelling, itching or burning.

No matter how small the treatment, it is still an invasive procedure, so you must take all your normal precautions to prevent the transmission of infection. Carry out the patch test in your clean treatment area with sterile, single use materials and clean thoroughly afterwards. Remember that; as soon as the skin is broken, your treatment area becomes contaminated.

We recommend that you make a single stroke behind the ear with the same pigment and a similar blade. If you are, as yet, undecided about which pigment colour you will use for the treatment, you should test the option colours as they will, in most cases, contain different compounds.



People with very delicate skin may redden just from your manipulation of the area around the patch test stroke but this is easily distinguishable from an allergic reaction to the pigment which will become intensely flushed and be accompanied with itching or burning.

If your client wishes to use a numbing cream then she should also test it at this stage but try to ensure that it doesn't mask any conta-actions. Please see the chapter on anaesthetics and pain relief for guidance on the protocol for using topical anaesthetics.

Document and take pictures of patch test results, even if there are no contra-actions. Also take pictures of your client's brows before treatment, after treatment and again, six weeks later before and after infills.

Record the materials and pigments used, any notes or observations and the results of the patch test on the Client Consultation Form and/or Client Record Card and ask your client to confirm and sign it.

After Care

Inform your client that it will be her responsibility to follow the after-care instructions that will be given to her following treatment. The long term success of the microblading treatment depends on proper care during the healing process so you must provide your client with guidance on how to retain the implanted pigment and avoid infection. Leaflets are available from your Trainer that explain correct aftercare procedure or you can prepare your own, based on information in the After-care section, later in this manual.

THE PROCEDURE



PRE-PROCEDURE CHECKLIST

Due to the invasive nature of your work you will need lots of (mainly disposable) supplies during each treatment. Procedure room prep time for a permanent cosmetics artist, exceeds most other beauty treatments so ensure that you leave enough time between clients to prepare thoroughly.

Being unprepared, and having to remove your gloves, wash your hands and retrieve additional supplies and then having to reglove, breaks the rhythm and your focus during the process. If you have to leave the clean area during a treatment it also adds risk of cross-contamination.

So ensure you are fully prepared with the following supplies on your worktable once it has been properly disinfected and covered.

- Disposable Worktable Cover or Barrier Film.
- Clean disposable Bed Cover.
- Lamp or Light Source (cover with Barrier Film)
- Microblading Pen & enough Blades for the treatment. Note: Wait until your client arrives to remove sterilised items from their packaging.
- Microbrushes and/or Applicators.
- Alcohol Steri-Swabs.
- Ring Cups, Pallette or Pigment Holder
- Pigments and Anaesthetic - Refer to your notes from the consultation and make sure you have all colours that you may need to hand.
- Personal Protective Equipment.
 - Disposable Gloves (several pairs).
 - Disposable Masks.
 - Disposable Hair Caps.
 - Disposable Apron.
- A sponge or other absorbant material to wipe away spills, drips or any excess pigment from your tools and the work area.
- Sterile Cotton Swabs or Gauze Dressings.
- Sterile Cotton Pads
- Mirror for the client. The handle should be covered with Barrier Film and changed after each treatment.
- Protective covering for the client to protect clothing during the procedure.
- Waste Receptacle & Sharps Container. A disposable tray or single use bag placed next to you will avoid the chance of touching your offensive waste sack during the treatment or placing contaminated items on your work surface.
- Water receptacle. Use disposable cups or autoclaveable laboratory ware.
- Disposable lint-free Wet Wipes (unscented).
- A box of Tissues - not to be placed on the work surface.
- Disinfected, sharpened Eyebrow Pencil for marking out.
- Rulers and Guides for design work (if not already completed outside your clean area)

The Procedure

This sequence of events assumes that you have carried out a client consultation, prior to the day of treatment, during which it has been determined that the client is a good candidate for permanent cosmetics and an appropriate colour has been selected.

BEFORE YOUR CLIENT ARRIVES

Ensure that the informed consent and client history forms are completed **and signed** prior to the procedure. Complete the Client Record Card, Informed Consent and Medical History forms at the consultation and keep these forms available for review.

Wash your hands and 'glove up'.

Clean and prepare your treatment area, removing all waste from your previous treatment. Wash down all surfaces and apply protective barrier film to *all* surfaces that are likely to be touched during the procedure.

Wash your hands and change your gloves!

Go through your pre-procedure checklist and place everything you need in your clean treatment area. Double check to make sure that all your supplies are to hand so that you will not need to step outside the clean environment during treatment. This will save time, maintain focus and reduce the risk of cross-contamination.

Change your gloves!

WHEN THE CLIENT ARRIVES

Review the information discussed at the consultation and ask your client if there are any changes or any health issues which have arisen in the intervening period that may affect her suitability for treatment. Confirm the details of the procedure and allow the client an opportunity to ask questions. Some clients may be nervous and will want reassurance over pain management, bleeding and aftercare. Listen to their concerns but show confidence in your abilities and explain the process fully so that they know what to expect.

Show the client the pre-sterilised tools and needles selected for the procedure, still sealed in the packaging. Show and confirm the pigment colours. Before moving the client into the clean zone and settling her onto the treatment couch, give her an opportunity to use the bathroom or have a drink so that she doesn't need to leave the area during the treatment. Remember, no food or drink in the treatment area.

Ask your client to wash her hands thoroughly to prevent the risk of her inadvertently touching her face and transferring germs to the treatment area. Provide your client with covering for her hair and clothing, then settle her onto the treatment couch and ensure that she is comfortable as she will need to remain still during the procedure.

Clean the client's eyebrow area with an antibacterial cleanser (ask your trainer for recommendations or use 70% Iso-Propanol Pre-Injection Swabs). Following the manufacturer's instructions, ask your client to apply an adequate amount of the chosen anaesthetic to the eyebrow area. Wait for the manufacturers prescribed time before removing the anaesthetic.

Please note: If you are not qualified to administer an anaesthetic, your client must take full responsibility for buying and applying even readily available, 'over-the-counter' numbing creams.

MARKING OUT

Remove the topical anaesthetic, dry the skin and begin measuring and marking out your eyebrow design. Provide the client with a mirror to show her the design work, and ask for approval. If the client wants to change anything, make those changes and only proceed once the client has seen and approved the size, shape and position of your eyebrow design.

Once you have an approved size and shape for your design, you can then shave, pluck or trim unwanted natural brow hairs and you're all set to proceed.

PREPARATION

During the preparation phase you will enable your client to pre-anaesthetise the eyebrow area and design the template for the final eyebrow shape that you will follow during your application.

See the following section on Pain and Anaesthesia for a detailed discussion on reducing your client's discomfort during and after the treatment. Different anaesthetic compounds are available so ensure that you encourage your client to follow the manufacturers recommendations for the use of the specific product that she is using.

Once your client has applied the anaesthetic compound and settled onto the treatment couch, you must try to relax her and explain that she needs to remain still and avoid unexpected movements while you are working.

Nervous clients may chat and fidget for distraction so this may be difficult. Agree a signal such as lifting her hand if she needs to shift position, scratch or sneeze. This is particularly important with your first clients as you will need to take your time and not be rushed by a restless client.

In order to design great eyebrows, you'll need to refer to your knowledge of facial morphology and use precise measuring techniques to ensure balanced proportions.

DESIGNING YOUR CLIENT'S EYEBROWS

Some of you will find designing eyebrows easier than others. If you are already working as a beautician and have experience designing and shaping the eyebrows in non permanent makeup treatments, you will have a head start. The rest will need practice, and lots of it, before you can sketch out a template of a perfect brow first time, every time.

Although we will cover the fundamentals of designing good eyebrows, putting this into practice will depend on skill and experience. We're not providing an alternative to the design principles of conventional make-up training, we're just giving you a way to make these principles last longer.

Eyebrow stencils are available, and some technicians do use them as a shortcut to achieving a neat looking template but in our experience they fail to take into account scale and face shape. Stencilled brows can sometimes appear disconnected from the individual and lack the unique qualities of a bespoke design.

“ There is something slightly anxiety-provoking about a permanent-makeup artist who brings out a stencil before the procedure. Your clients want to know they are in the hands of a professional - so reassure them! ”

A quick search on the web will show many ways to draw symmetrical, well-proportioned eyebrows, those techniques that are the most effective will be discussed during your class. Our preferred method is simple and will produce great results no matter what face shape your client has. We'll set out the process of creating an eyebrow template that's perfectly suited to your client later in this section of the manual.

We've discussed the basic principles of eyebrow design in the chapter on Facial Morphology but now it's time to apply these principles to your individual client.

We recommend that you take the time to draw in your template, the resulting outline may not look as neat but it will suit the proportions of your client's face far better. The process of measuring, marking and assessing the dimensions of your client's face helps you view your design in context and not just as a brow shape.

It will often comfort a potential client to ask that they wear their eyebrows to the consultation appointment the way they are accustomed to applying them, and to bring the makeup pencil/powder used. This sends a signal that the technician is concerned about providing familiarity, which is a major concern to people who are considering permanent cosmetics.

As soon as she arrives, it becomes clear what the potential client considers an acceptable eyebrow design. Some are pencil thin, some are very chunky, some long, some short, some uneven, and some clients will arrive without any makeup because they do not routinely apply makeup on their brows at all.

Once you have had the opportunity to see how the client usually wears brow makeup, you can then ask what she thinks of her current look. If the client has unflattering eyebrows and says “I love my eyebrows like this, I just want to make them permanent”, you may have a difficult task ahead. If the client recognises that her current brows aren’t particularly flattering, you can then work with her to find her perfect brow design. Happily, some of your clients will already have developed a flattering brow design and you can then simply use this as a template for the procedure.

An important point to remember is that we all have a ‘normal’ vision of our appearance. We become accustomed to looking a particular way. A change in appearance, even a positive one, is sometimes difficult to immediately accept.

In the design process, collaboration is important. If you can’t get the client to accept the design at the pencil stage, how can we expect her to be happy with the final result?

Great eyebrows are perfectly matched to the person wearing them. You can create a set of brows that is neat, balanced and perfectly executed but they won’t look right if they don’t compliment the individual features of the face.

“ The consultation and design process is important. In fact, we often spend *half* of the total procedure time designing the eyebrows themselves. ”

Individual Design Considerations

Please refer to the chapter on Facial Morphology and the design element of the class for an introduction to eyebrow design principles. When you come to applying these principles to a real life person, you will find that individual faces don’t always fit neatly into a specific category. This is where you become more than a technician and you earn the right to be called an artist. We can provide you with some basic principles for guidance, but they are not strict rules that can never be broken. It is your vision that creates the transformation. We strongly suggest, however, that until you are experienced enough to make design choices instinctively, you take note of the following guidance.

WIDE OR NARROWER SET EYES

Move the frontal zone (bulb area) slightly *inward* to compensate for wider set eyes and *outward* for narrow set eyes. If the client has hair in the brow area, the placement of the natural hair, particularly in the bulb area must be respected. If the bulb is extended inward, past the natural hair growth, once the procedure has healed, it may be very apparent and contrast with where the natural hair begins.

HIGH OR LOW FOREHEAD CHARACTERISTICS

Arches are more flattering placed slightly higher to compensate for a client with a high forehead, and lower for those with lower forehead characteristics. This practice is assuming this can be done without departing from any natural hair growth too far. Many clients who have hair growth in the arch area may agree to a few hairs being removed to allow for a slightly higher arch

THE SHAPE OF THE FACE

Round, oval, heart, long, diamond and square shapes - is also a primary consideration when determining arch, height and tail length.

- **The round shaped face** will appear more aesthetically pleasing if a more angular design is used. Avoid rounded eyebrows on a round face.
- **The oval shaped face** is considered the most desirable shaped face to work out, granting you many options. Utilising the standard measurements will normally produce an eyebrow design which requires little modification.
- **The heart shaped face** is wider in the forehead area. To balance out the top-heavy appearance, eyebrow tails should be kept slightly shorter.
- **The long shaped face** requires width to offset the appearance of having a long face. Arches should be kept at a minimum so as not to enhance the linear appearance and tails lengthened slightly to provide some horizontal lines to the facial structure.
- **The diamond shaped face** can benefit from a good balance of vertical lines achieved with the design of the arches and a well-placed exterior zone (eyebrow tail area).
- **The square shaped face** can benefit from minimising the illusion of bulk at the jaw line by extending the eyebrow tails slightly out for balance and raising the arches for linear effects. This is a difficult facial shape to work with.

FACIAL SYMMETRY

Every face is asymmetric, and this is a fact that needs to be taken into consideration when evaluating the face for brow shape and placement. First, look for vertical facial symmetry, then brow placement. Is one brow higher or eye higher than the other? Is one brow more arched than the other?

Then look for horizontal symmetry. In your horizontal analysis, try to evaluate if the three areas: the upper, middle and lower zone are of equal width.

“ Be patient, *Expect your client to want to make numerous adjustments to their eyebrow shape, and factor it into your scheduled appointment time.* ”

Then, look at the features in each area. Is the forehead narrow, or the chin long? Once you have noted both vertical asymmetries and the horizontal balance, you can then assess whether this will have any influence on your design of the best brow shape for your client. Firstly, consider the eye size and shape, but also consider the size of the nose, lips, forehead and chin.

Your design should take account of, but not be tied to, any asymmetrical features as the brows will also be judged in relation to each other. We must be careful not to highlight asymmetry by treating each side of the face totally independently. For example; if one of your client's eyes is lower and wider than the other, if we only measured from each eye to the brow it would make the difference more apparent. The solution is to split the difference between the measurement from the eye and the measurement from the brow. The amount of adjustment that you make to compensate for lack of symmetry is subjective so you may have to adjust the position several times before you reach the best compromise.

preparation

01



PRE-PROCEDURE ANAESTHETIC

02



MEASURE EYEBROWS

03



MARK KEY POINTS

04



CORRECT SYMMETRY

step by step

05



SHAVE

06



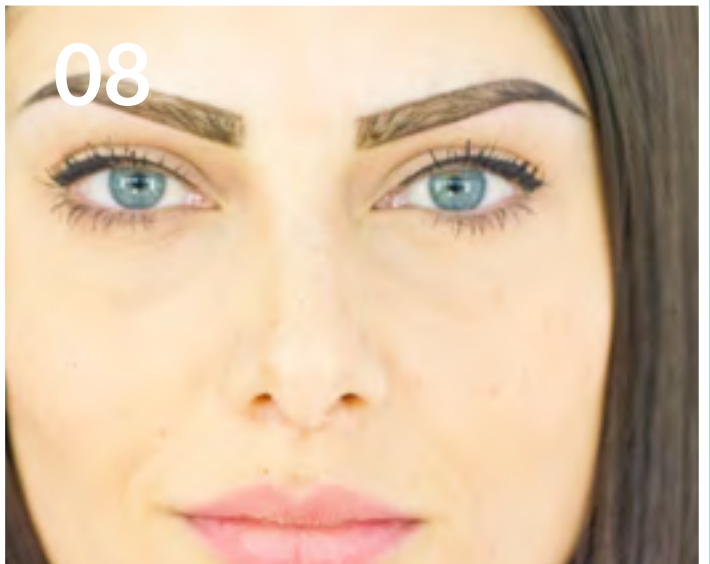
PLUCK

07



TRIM

08



READY!

Drawing and Shaping Eyebrows the Dermagraph® Way.

Drawing and shaping the eyebrows is, of course, a key part of the process of brow design. We need to acknowledge the principles of makeup artistry and facial morphology in the shape, size and position of the brows and give ourselves clear guides for the treatment.

We need symmetry and balance to create a pleasing design but at the same time we must respect the individual, and sometimes asymmetrical, characteristics of our client's face. Minor adjustments can make a big difference to the overall effect of the brow so, precision and accuracy of measurement is especially important.

These are the reasons why drawing and shaping the client's eyebrow will take a considerable amount of time. In many cases it takes longer than the actual implanting of colour. It is essential that both you and your client agree on the design.

When discussing the brow shape with your client, project confidence and explain your design choices but listen to your client's views as she will be living with the results and seeing the design every time she looks in the mirror or takes a 'selfie'.

Some clients may request that you draw much higher than their natural eyebrow arch or create unnatural angles. We would strongly advise against doing anything that you think your client will regret and you will not be proud to display. Eyebrow trends change, we have a responsibility to ensure that the shape and outline we create will stand the test of time. If a client makes a request that you are unhappy about implementing, and you cannot persuade her to compromise, we would suggest that you decline the work.

“

Remember that every client is a living advertisement for your services over the following year or more... .

”



BASIC PROPORTIONS

As discussed earlier in this section, the three sections of the eyebrow are the bulb, the body and the tail. The majority of female eyebrows are between 4.5cm, and 5.5cm. Only occasionally reaching 6cm or above. When drawing eyebrows, we measure the main body as comprising two thirds of the eyebrow and the tail equalling one third of the overall length.

The end of the tail should never be lower than the bulb and the lowest part of the bulb should never be below the top of the eye when it is open normally, looking straight ahead.

When settling upon a length, take into account;

- The width of the eyes.
- The brow bone.
- the width and depth of the forehead.
- Natural brow hairs (if any remain)
- Your client's face shape.

Drawing the Template - Step by Step

THE ESTABLISHING LINE

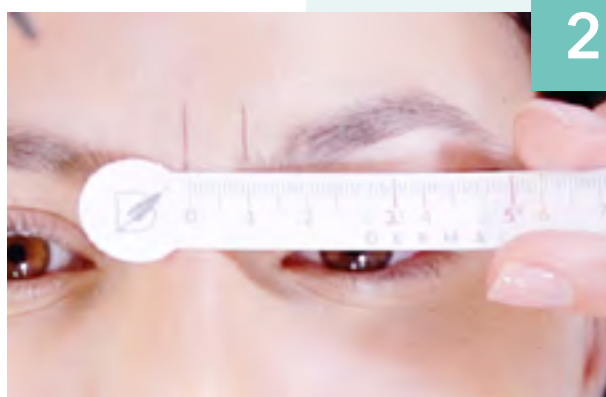
Mark a vertical line between the brows, the same distance from each eye. Take care to mark this accurately as all length measurements will be taken from this point.



POINT 1 - LEFT* BROW ORIGIN

From the Establishing Line measure and mark the origin or start of the client's natural brow. This will be a distance of 1 to 1.5cm and should never be further than the distance to the inner tear duct.

*We use left and right from the client's perspective as our viewpoint changes when we move around.



POINT 2 - RIGHT BROW ORIGIN

Measure the same distance on the other side of the Establishing Line to mark the start of the client's right brow.



LENGTH OF BROW - L.O.B.

This marks the outer extent of the eyebrow, measured from the brow origin on each side. We try to maintain the length of the client's natural eyebrow.

If the eyebrow tail is not visible but you can see the arch, you can use this as a basis for the length of brow. It should be roughly half as much again as the length from the origin to the arch.



Drawing the Template - Step by Step

5



THE ARCH

Based upon the length of the brow, we next make a vertical line to mark the position of the arch.

The ideal position of the arch is calculated by dividing the length of the brow by the Golden Ratio (1.618) or roughly two thirds of the overall length of the brow. You can use the colour coded marks on your Dermagraph® rulers for guidance or refer to the table at the end of this section.

6



THE BASELINE

Using the thread in your kit, mark a horizontal line at the lowest point of the brows. Take care to make this line straight, balanced and parallel with the eyes.

All vertical measurements will be taken from the Baseline, so it is vital that you get this correct. It may take several attempts before you are happy with the result but asking your client to lightly close her eyes will help you to judge the symmetry of your Baseline.

7



THICKNESS OF FRONT - T.O.F.

Mark another horizontal line, parallel with the baseline, at the highest point of natural hair growth at the origin of the brow. This will mark the starting thickness of the eyebrow template.

8



HEIGHT OF ARCH - H.O.A.

A third horizontal line should be marked with your thread to show the highest point of the eyebrow template, the peak of the arch.

Drawing the Template - Step by Step

DOUBLE CHECK

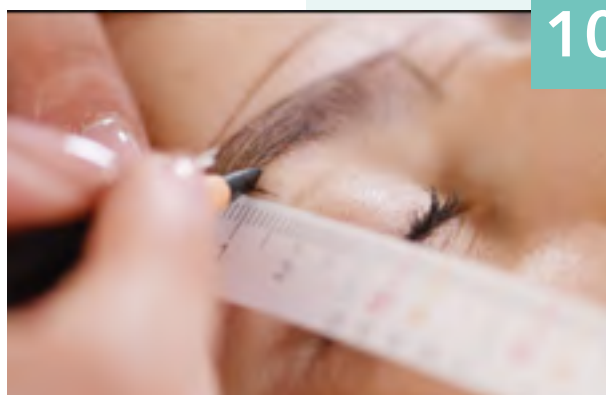
With your ruler, make sure that your horizontal thread lines are balanced across both brows and parallel with the baseline. If your vertical marks do not cross the 3 horizontal lines, extend them so that they intersect.



THICKNESS OF ARCH - T.O.A

Decide upon the thickness of the brow at the Arch and measure this from your upper thread line (HOA), taking care to mark the same measurement on both brows. Accuracy is very important here so ensure that your pencil is sharp to avoid imbalance between the left and right eyebrows.

The Thickness at the Arch of the eyebrow is normally slightly less than the Thickness of the Front (TOF).



HEIGHT OF TAIL - H.O.T.

The final dimension that you need to mark is the height of the end of the eyebrow, the Tail. Take this measurement from the Baseline at the point where you have marked the Length of the Brow (LOB).

The tail should always be higher than the Baseline but not above the middle horizontal line that you have marked with your thread to show the Thickness of the Front of the brow (TOF).



JOIN T.O.F. TO H.O.A.

Now you can begin to draw the outline of your template by joining the upper mark at the origin of the brow (TOF) to the highest point of the arch (HOA).

Repeat on the other brow and check again for symmetry.



Drawing the Template - Step by Step

13



JOIN H.O.A. TO H.O.T.

Continue to create your template outline by joining the point marked as the Height of the Arch (HOA) to the endpoint of the eyebrow at the Height of the Tail (HOT).

14



COMPLETE THE OUTLINE

Draw a line from the origin of the brow at the Base-line to the point at which you marked the Thickness of the Brow (TOB) and then on to join the line previously drawn at the Height of Tail (HOT) mark.

15



TWEEZE EXCESS HAIR

Once you and your client are satisfied with the shape and symmetry of the template, take a photograph of your work and proceed to remove any hairs that fall outside the outline that you have marked.

16



REMOVE GUIDES

With a wet-wipe, remove the guides, taking care not to erase the outline. You can get very close to the edge of your template by draping the wipe over your finger and using your nail to get right up to the edge.

Drawing the Template - Step by Step

SOFTEN CORNERS

Add the finishing touches to your outline and create a more natural look by rounding sharp corners.



FINISHED! - Now you're ready to microblade...

THE GOLDEN RATIO

Found in nature, art and architecture, the Golden Ratio is a proportion that is particularly pleasing to the eye. What most people would consider to be beautifully shaped brows have a proportion of Body to Tail that is 1.618 to 1. In other words, the body of the eyebrow is 1.618 times longer than the tail. In practice this works out that the the tail measures slightly less than a third of the overall length of the brow.

Brow Length LOB	BODY	TAIL	Brow Length LOB	BODY	TAIL
4.5cm	2.8cm	1.7cm	5.6 cm	3.5cm	2.1cm
4.6cm	2.8cm	1.8cm	5.7cm	3.5cm	2.2cm
4.7cm	2.9cm	1.8cm	5.8cm	3.6cm	2.2cm
4.8cm	3.0cm	1.8cm	5.9cm	3.6cm	2.3cm
4.9cm	3.0cm	1.9cm	6.0cm	3.7cm	2.3cm
5.0cm	3.1cm	1.9cm	6.1cm	3.8cm	2.3cm
5.1cm	3.2cm	1.9cm	6.2cm	3.8cm	2.4cm
5.2cm	3.2cm	2.0cm	6.3cm	3.9cm	2.4cm
5.3cm	3.3cm	2.0cm	6.4cm	4.0cm	2.4cm
5.4cm	3.3cm	2.1cm	6.5cm	4.0cm	2.5cm
5.5cm	3.4cm	2.1cm	6.6cm	4.1cm	2.5cm



THE MICROBLADING TECHNIQUE

The actual technique of microblading will be covered in depth by your tutor in the class. It is not something that can be adequately expressed in a written manual. You will need expert, hands-on coaching in how to stretch the skin and use your microblading tool with the amount of pressure needed to place pigment at the required depth in the skin.

We are implanting colour below the Epidermis, in the upper part of the Dermis, between the Papillary and Reticular layers (refer to the section on skin anatomy). Any lower, and the lines will lose their definition as the colour pools in the Subcutis. Any higher, and the tattoo will not last when the layers of the Epidermis naturally shed as it renews itself.

You will learn how to hold your microblading 'pen' and pass your blade across the skin to achieve realistic hairstrokes inside the boundary of the eyebrow template. We don't blade in the line around the border of the template as this would look unnatural.

We are aiming for strokes that will stand up to close scrutiny and will be almost indistinguishable from the real hairs of your client's brow. Take your cue over direction and length from the way the natural hairs grow. You'll notice that there are no lines that are perfectly straight in nature so you will be creating shallow arcs with your blade, moving from the origin line outwards.

For the best results you need to be making quick, deliberate and confident strokes with your microblading pen held at the optimum angle. It will take time and an awful lot of practice to achieve a 'feel' for the resistance of the skin to different needle configurations. So be prepared for some late nights with your practice skins...

“ Honestly? Lots of practice is the only way to become an exceptional microblader. ”

Speciality Techniques

Once you have mastered the the basic technique of the microblading stroke on your practice skin, adapting the placement and grouping of the strokes can create stunning effects to enhance the appearance of the treatment.

3D Lines

Remembering to keep the skin around the eyebrow as taut as possible, from top to bottom. This will allow for even penetration and help you to avoid irregular-looking hair strokes.

Lines should be implanted at a 45-degree angle to the baseline from which they are rising to achieve the most realistic look. If the lines are too far apart, they will help with an artificial appearance. If the lines are too close together, they will heal blurred and have more of a make-up powder-fill finish.

Many technicians prefer starting the eyebrow one to three hair strokes inside the brow markings away from the nose. Then they can come back and add additional hairstrokes with less fear of getting the eyebrows too close together. Crossing lines will look unnatural and create a patchy outcome. Wipe away the drawn line and touch up any unevenness created by the outline.

Shading

Shading leaves a darker, more defined and slightly longer lasting appearance than 3D lines. It is also substantially easier to design, whilst sacrificing the sometimes unbelievably realistic hairstrokes of the 3D technique.

Stretch the skin side to side in the direction of your movement. Starting from the inside, make your way toward the outside of the eyebrow. Shading strokes are placed closely enough together that, when healed, the result resembles that of softly applied makeup.

Wipe away the drawn line and touch up any unevenness created by the outline. We wouldn't recommend tattooing the outline into the skin. Altering it is almost impossible and it never looks soft or natural.

Stretching the Skin

Evenly stretching the skin as you microblade will become one of the most important techniques that you will learn. It allows you to make an even blade stroke and implant the pigment at a consistent depth.

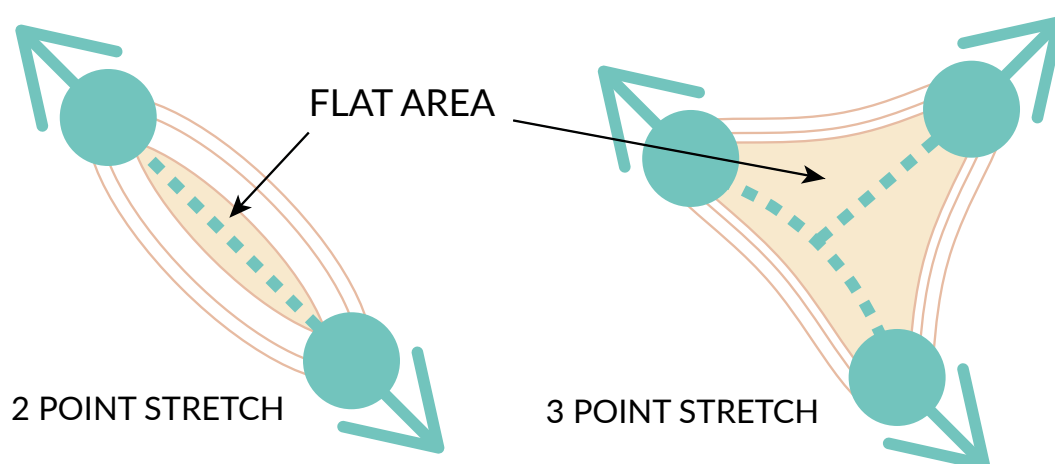
Our skin is a complex structure of layers that aren't attached solidly to our musculature or bones. If you drag the blade across the skin without stretching, friction will create a wave or wrinkle in front of the blade that prevents it from evenly gliding. Rather like dragging a your foot across a loose carpet or trying to iron a shirt without flattening it first. Eventually, the wave will build up to such an extent that the blade will bounce up over it. You may get away without bounce for short strokes but; as the blade pushes against the wave, the needles at the front of the blade are entering the skin at a different angle to those at the back creating uneven pressure and hence, uneven depth.

3-POINT STRETCH

Our aim is to tension the skin evenly so that it remains flat as we pass the blade across it. To stretch it effectively, we need to tension it in two directions. Both across the direction of the stroke and along it. To do this we must use at least three points of contact. Two fingers pulling against each other and another pulling the skin at right angles to the line of stretch between these fingers.

Imagine stretching a rubber band between two fingers, the area inside the rubber band is pretty small but; when you pull one piece of the rubber band off to the side, the triangular area enclosed by the band gets much larger.

Use two fingers on your free hand to stretch the skin in a kind of reversed pinching movement across the direction of the blade stroke. The edge of your pinkie finger on your pen hand can then pull the skin in the direction of the stroke while at the same time steadying your hand. Once you are used to it, this is quite a comfortable arrangement for the main sections of the brow but see opposite for suggestions on hand position as you move to the other sections.



HOW MUCH PRESSURE?

The amount of pressure that you need to apply to stretch the skin will vary depending on the characteristics of the individual's Dermis. Experience will show you that the skin on the brow area can vary from thin and stretchy to thick and resilient.

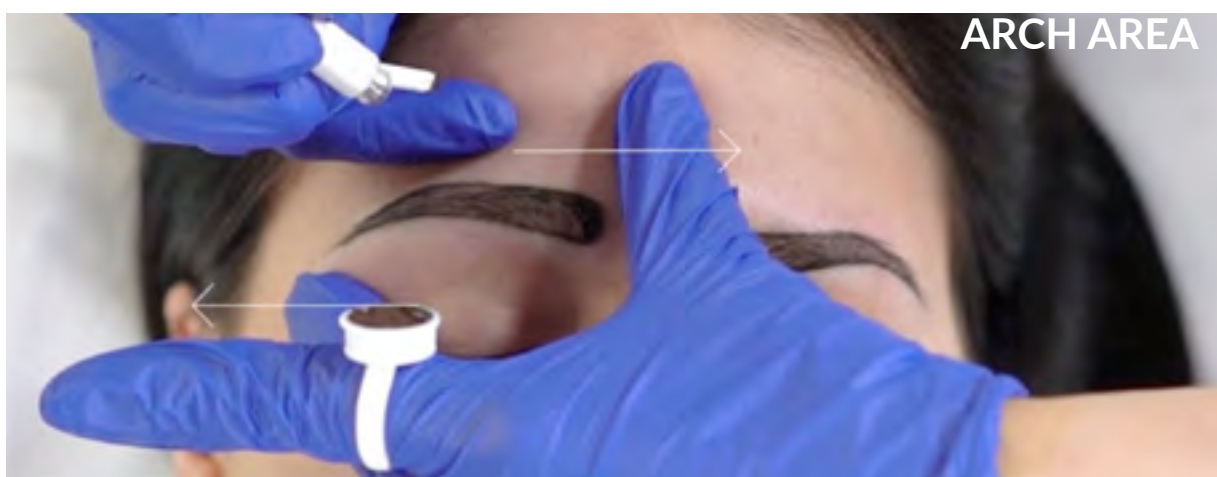
Most microbladers, when starting out, will be reluctant to put enough pressure to stretch the skin to it's full extent. Be bold, you're communicating your confidence to your client through the way you handle her skin. You would have to exert a lot of pressure in this area to inflict pain and you can always tell her to let you know if she is uncomfortable. Pressure will also distract from the sensation of the blade stroke. The tighter you stretch, the easier the needles will glide across the skin and penetrate the Epidermis.

SKIN STRETCHING TECHNIQUES

As you work across the brow, you'll need to adjust your position to keep the section of skin that you're working on taut and flat. This can be difficult to achieve as you move between each eyebrow. It's often the reason why, for novice microbladers, one brow's colour retention is better than the other. Even if you are exerting the same pressure with the pen, if the skin is pulled tighter on one brow than the other, the blade will go deeper. It is, therefore, vital that you stretch consistently from the first stroke to the last.

Develop a feel for the skin and take the time to adjust your body position so that you can comfortably exert as much force as you need, even as the direction of your stroke changes when you move from the Bulb to the Arch to the Tail.

Here are some suggestions for hand position on the different sections of the brow but find a willing friend (who doesn't mind having her face pulled around) and experiment without a blade.



APPLICATION

01



MIX COLORS

02



STRETCH SKIN

03



CREATE HAIRSTROKES

04



FINISH 1ST PASS

STEP BY STEP



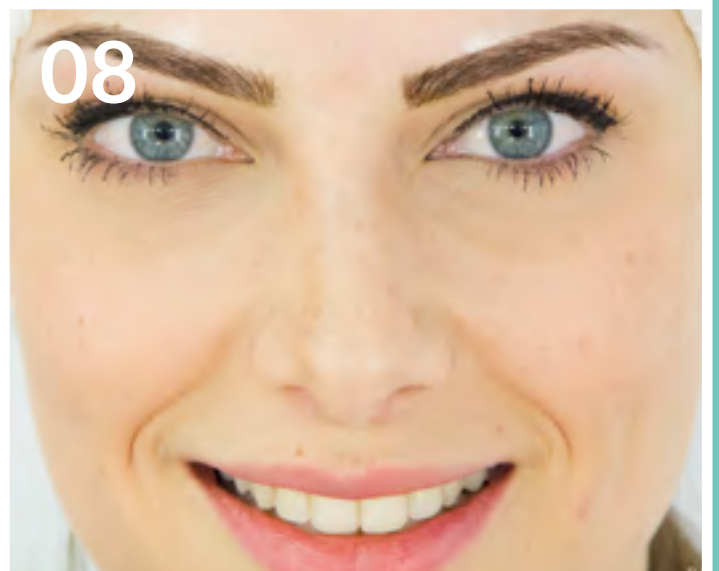
ADD EXTRA COLOR



WAIT FOR 5 MINUTES



CLEAN EXCESS COLOR



FINISH!

(add post-procedure anesthesia and repeat step 1-7 if necessary)



CHOOSING YOUR NEEDLES

There are a wide selection of blades to choose from for microblading and it can seem a little daunting when you're first starting out and hearing terms like '9 Flexi', '14-U' and '21-Hard'.

Rest assured that all blades work on the same principle, the variations are just better suited for different applications. Most technicians will have a favourite needle. This will be their general purpose 'go-to' tool that will comfortably allow them to execute good hairstrokes on a variety of skin types, and then they will have a selection of special purpose blades that allow them to vary the stroke or work on different skin characteristics.

Microblades are made up of a collection of individual micro-fine needles bound together side by side in different configurations for different tasks. Precision manufacturing methods have allowed us to make needles that are hair-thin and incredibly sharp, perfect for making the tiny stroke through the Epidermis. The gap between the needles acts as a reservoir for the pigment (like an old fashioned quill pen) that runs down into the stroke as the needle is dragged across the skin.

There are two main families of needles; 'Flexible' and 'Hard', although there is a small selection of blades that bridge the gap between their characteristics, known as 'Semi-Flexible'. The difference in flexibility is achieved by the way that the needles are bound together in the blade. We'll start by discussing this difference in flexibility and why this changes the characteristics of the blade.

Flexi Needles

The actual needles contained in the blade aren't made of a steel that is any more flexible than the others but the way they are bound together allows them a small amount of movement or 'flex'. These blades are bound with a soft grade of polymer. Dermagraph® Flexi Blades have a white polymer sheath.

Flexi needles are ideal for beginners, because they can absorb, even out and limit some of the pressure that you put on the pen. This will help to prevent your stroke from going too deep. They give a softer, more superficial hairstroke. On some occasions though you may need to repeat the hairstroke on the 2nd pass in order to get the desired intensity.

They are ideal for sensitive or thin / aged and compromised skins.

Hard Needles

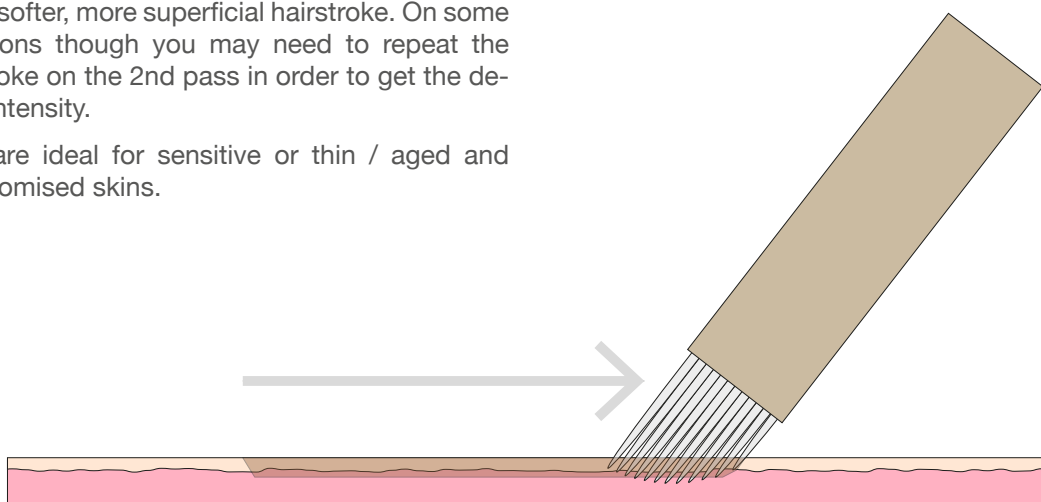
These are the 'divas' of the needle world. They are for bold, confident results... and as such, should only be used by experienced, confident artists. Because there is zero absorption of the shock, they tend to go deeper into the skin with less pressure. These blades are bound in metal or a hard grade of polymer plastic, resulting in more definition in your hairstrokes.

We wouldn't recommend these needles for sensitive or thin skin but they are great for thicker and hard skins.

Semi Flexible Needles

As you can probably guess from the title, these needles have only a small amount of flex. They can be seen as a transition blade from flexi to hard, having some of the pressure limiting capabilities of the flexi blade but still allowing a deep enough stroke in a single pass. Use of semi flexible blades is largely a matter of personal preference. Some artists love them but others think that, by trying to compromise between the characteristics of flexible and hard blades, they lose the best qualities of both.

To give these blades a small amount of flex, they are bound in a medium grade polymer sheath. Dermagraph® semi-flex blades are usually yellow in colour.



NEEDLE CONFIGURATION

The numbers in the title of each needle type refer to the number of needles that each has in alignment and named to describe the arrangement of the needle points at the end of the blade. Unlike tattoo pen cartridges, microblading needles are configured side by side in a row of a fixed size.

Here are some of the more popular blades and a description of their characteristics to help you choose a set of needles that will suit every occasion.

7 Flexi Angled or 'PeeWee'

This little guy is designed to give high definition fine hair strokes, it is ideal if you want to target between two existing hair strokes with accuracy - for example you want to add a different colour for 3D effects. It is suitable for all skin types.

We usually recommend this to students after they are very comfortable with their pressure skills as it is easy to go too deep with a narrow blade.



9 or 12 Flexi Angled 'Helpful Auntie'

Available in a 9 or 12 needle configuration, this is a general purpose needle and one that you should keep in your kit. If you want to be certain which needle you have, take a photo on your smart phone and zoom in. You can then count the number of needles in the blade to get it's number.

The 'Handy Auntie' is a multi purpose needle which is a great starter needle for students, because it gives fine lines, it is ideal for blonde women with fine natural hair, as it can emulate them accurately.

Because it is flexi, it doesn't go too deep, so it is ideal for beginners to avoid colour migration, it also gives you the option to repeat the hairstroke, with less pressure for a more defined result.



18-21 U Shape 'Picasso'

This is one of our personal favourites, it allows you to create truly stunning results, and super fine lines if you know how to use it.

The 'U Shape' is great for the inner corner of the eyebrows. As in the inner corner, for great results you need to be able to draw smooth, angled curves in a short space.

It combines the attributes of a multi flat needle and a single needle. What do I mean by this? If you hold the blade vertically and use the point of the 'U', less needles come into contact with the skin so it functions as a single needle allowing you to create tiny curved hair-strokes. If you angle the needle, it allows more needles to touch the skin, thus it is easier to create a straighter hair stroke. So by using a U-Shape needle you can create a variety of hair strokes from very curved to straight - all in one needle.

You can use it on different parts of the eyebrows with different techniques, for varying effects. The 18 U-Shape is available in both Flexi (white), Hard (black) or Semi-Flexi (yellow) to suit different skin types and skill levels from the Dermagraph® online shop.



14-21 Angled Needles

They are ideal for longer and thicker hairstrokes, for example; brunettes and hard, thick skin types.

With more needles in the blade there is more capacity for carrying pigment so blades with 14 or more needles are suitable for long strokes in the body of the brow.

They are also suitable for creating shadow effects through different shading techniques because the needles are thicker with a shallow taper, giving more of a gap between each point. This gives a slightly different effect that would be difficult to attain with needles that have less gap, for example; size 7-12 needles.

High quality Dermagraph® blades are available in 14 point or 18 point in both Flexi and Hard types .

Try a range of needle types and configurations on your practice skin and you will immediately notice the different feel of the varying blade types when you practice different strokes. The higher the number of needles in an Angled blade the more it will want to go in a straight line. The U shape, properly handled is capable of doing pretty much any stroke you could wish for but it takes a lot of practice to get consistent depth. The narrow blades with less than 9 needles will do precise, delicate strokes and tight curves with ease but they carry less pigment so are less suitable for longer straighter lines.



PAIN & ANESTHESIA

“WILL IT HURT?”

This is one of the most common questions you will be asked as a permanent cosmetics artist.

So... does microblading hurt? We'd be lying if we said it was pain free but the perception of this pain is specific to the individual. A large contributor is the anticipation of pain, pre-procedure. So effective pain management, starts here... at the psychological level.

Fortunately there are three advantages to applying eyebrow microblading in our era:

1. The technique generally hurts less than conventional tattooing as you are working on the upper layers of the skin. Additionally the pressure of several small needles hurts less than that applied by one larger needle.
2. Topically applied, over-the-counter anaesthetics are more readily available and more effective. The amount of active ingredient, such as lidocaine, has also increased over time.
3. Application to the eyebrow area hurts less than the lips, and the eyelid. As the eyebrows have some of the thickest skin on the face, the nerve endings are more recessed.

SHOULD I USE TOPICAL ANAESTHETICS?

There is a range of topical local anaesthetic products for surface (skin) numbing available from chemists and pharmacies. However, none of these products are licensed specifically for local anaesthesia prior to tattooing or permanent cosmetics. When using a topical local anaesthetic preparation; responsibility for purchasing and application of the product should remain with the client.

The client should be advised to read the Patient Information Leaflet which accompanies the product and should be aware of the following:

- Warnings, cautions and contraindications.
- Side effects.
- That they are using the licensed product for an un-licensed application.
- Any recommendations regarding administration and application.

THE LEGALITY OF ANAESTHETICS

Anaesthetics are a medicine, and as such you need to be qualified to administer them. In the same way that you are not permitted to give someone an Aspirin or Paracetamol for their headache if you are not qualified to do so, they are perfectly entitled to buy and use medicines to treat themselves.

To avoid legal complication and remain within the framework of the law, if the client would like a local anaesthetic, she should take responsibility for buying it herself or ask her doctor to prescribe it for her.

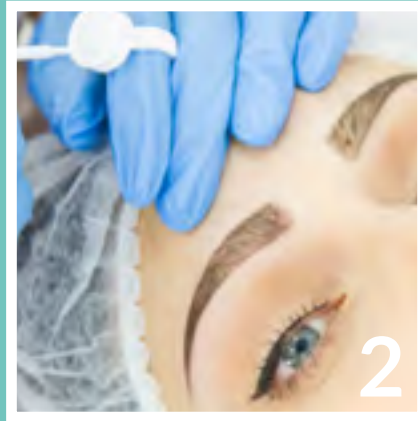
There are some important considerations if you choose to use topical anaesthetics. None of the widely available numbing compounds have been licensed for use in tattooing, piercing or permanent cosmetic applications in the UK. So it is important to note that while you may be using a legally available licensed product, you would be using it for an unlicensed application.

In this respect, it is recommended that a topical anaesthetic be administered only after consultation with the client as to the risks involved and obtaining a signed consent form to this effect. Even with consent, we should let you know that administering any anaesthetic, be it by oral, injection or topical application, may leave the user open to prosecution under the Medicines Act 1968 or Health & Safety at Work Act 1974.

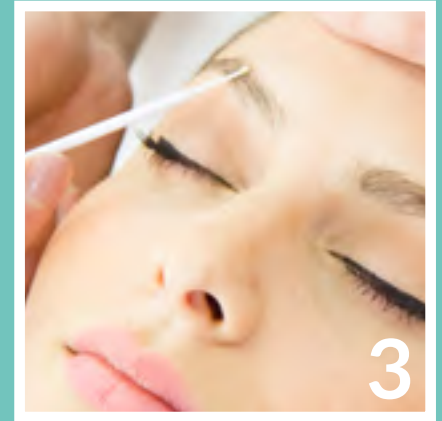
ANAESTHETIC APPLICATION



PRE-NEEDLE AREA
(to ensure maximum absorption)



DIP MICROAPPLICATOR
(using disposable ring & applicator)



APPLY ANESTHETIC
(ensure eyes are closed)

IMPORTANT: Unless you are qualified to administer anaesthetics, responsibility for purchasing and applying topical anaesthetic creams must remain with the client.

PRE-PROCEDURE ANAESTHETICS

Pre-broken skin anaesthetics are usually thicker in consistency, in order to stay for the minimum required time on the skin. It should be applied prior to drawing your eyebrows, as recommended by the manufacturer's recommended time period prior to the application.

POST-PROCEDURE ANAESTHETICS

Post-procedure (or broken skin) anaesthetics, are hydrated products. Use these aids sparingly, as when they come into contact with pigment being tattooed into the skin, they can have a diluting effect on the pigment if used excessively, much as one would see if they put a drop of pigment in a pigment cap and added a drop of liquid. If you apply anaesthetics too frequently, you may find the final results of the healed procedure appears more diluted than expected.

It is always important to remember that some clients metabolise the anesthetic faster than others, causing it to wear off, requiring more applications of anaesthetics during the procedure.

SOME PAIN IS GOOD...

Why?

Because... "numb skin is dumb skin" and the client signaling their discomfort or pain levels is valuable information, stopping you from overworking the skin and potentially, causing scarring to the client. Ideally your client should have a degree of sensation

OTHER METHODS

So, what did technicians do before over the counter local anesthetics were readily available? Methods such as the stretching techniques, having short rest periods, playing non-intrusive and soothing music (e.g. meditation music) and using distraction (e.g. counting) can also be employed and are still very effective in their own right. These are discussed in more detail in the next section...

HEALING & AFTERCARE



Aftercare is key to the successful outcome of the microblading treatment and the welfare of your client. You will also benefit from an understanding of the healing procedure as; how the brow appears immediately after being microbladed bears little resemblance to how it appears several days or weeks later. Become acquainted with the healing process and you will be a better technician and a better advisor to your clients.

The tattooing process creates a wound with the small cuts inflicted during the procedure. Once the body detects the wound, the healing process begins. Cells are sent to the tattoo site to prepare for the rebuilding of the damaged skin and to ward off bacterial invasion. Inflammation can last up to 72 hours, although this is normally slightly less for microblading given the thickness of the skin and the fact it acts on superficial (epidermal) skin layers.

Pigment particles, will then 'float' within the skin tissue until they either adhere to or are encapsulated by skin cells.

“ It is important that you have an understanding of the healing process as, how it appears immediately after, will look very different to the final healed result. ”

There are three main phases in the healing process:

1. **The Inflammation Phase.**
2. **The Proliferation Phase.**
3. **The Maturation Phase.**

THE INFLAMMATION PHASE

Inflammation is a normal and necessary part of the healing process and a response to damaged cells even if there is no infection. Redness, swelling and sensitivity of the area around the wound will occur but should stabilise quickly if the wound does not become infected.

This phase contains two main activities:

Haemostasis: Stopping blood loss from damage to capillaries and small vessels. Vasoconstriction (a decrease in blood flow) occurs in the area, and clotting takes place. Platelets and blood clotting proteins combine to form clots that restrict the loss of blood.

Inflammation: The body calls for more immune cells to migrate to the wound site to stabilise the wound, limit the injury and prevent bacteria from gaining access to the vulnerable underlying skin tissue.

THE PROLIFERATION PHASE

New capillaries are formed and deliver nutrients to the surrounding cells for tissue reformation. The normal layers of the epidermis are primarily restored after around 3 days.

Cosmetic tattoos will begin to flake, in about three to seven days. This process *should not* be interfered with. Instruct your client not to pick or scratch the area during this phase.

THE MATURATION PHASE

The wound contracts with the formation of scar tissue.

- **18-35 days** Collagen continues to be deposited, but the main collagen output completes its cycle during this period.
- **50-90 days** The basement membrane has completed its reformation cycle and further pigment loss through the epidermis no longer takes place. The remaining pigment settles.
- **3 months to one year** Wounds reach their maximum strength, depending on surface area and depth.

As you can see, many of the primary processes of the healing stage will happen long after your client leaves. This makes correct instruction for after-care and client education very important.

After Care Instructions

What to expect after the treatment.

To ensure the best results from your treatment and to avoid complications such as infection, it is essential that you follow instructions for the after care of your tattoo. Kept clean, and left alone, your body will naturally heal the procedure to leave well defined, lasting hairstrokes.

The body's natural defences, the immune system, will form a scab to act as a barrier against infection while the area is healing. After a few days the scab will come away. We recommend dry healing, and we strongly recommend that you do not pick at the scab as this will result in pigment loss.

You may experience a little inflammation or swelling after the treatment, you also may notice a clear fluid on your treatment area, this is Lymph, a fluid that delivers bacteria-fighting, white blood cells and helps to remove infection. This is all perfectly normal, and what we would expect during the healing process..

Do not place an ice pack or similar straight from the freezer to reduce the swelling. This has not been shown to be beneficial, using a cooler from the fridge may give a little relief if needed. Cold gel packs from the refrigerator may bring relief if you have a low pain threshold. However, a clean cloth or gauze should be placed between the gel pack and the skin to prevent infection. This method is not recommended, as this allows moisture into the treated area and moisture and inflammation act as the perfect breeding ground for bacteria to form. Cold packs are not to be used for anyone with vascular blood disorders or cold urticaria.

It is normal in the first couple of days, post procedural, for the colour to appear very dark. It will then appear much lighter or you may not be able to see the colour at all. This will reappear within four weeks. This is all within the range of what can normally be expected. If your colour maintains the darkness after two to three weeks please bring this to your technician's attention, this could be the result of hyperpigmentation.

If the area of the treatment gets wet, pat it dry with some sterile cotton gauze.

For the first week avoid the following activities.

- Touching the brow or surrounding area without thoroughly washing your hands.
- Swimming in either a chlorinated pool or sea water
- Avoid steam from showers, Jacuzzis and saunas .
- Any gym routine that involves high cardiovascular work that would result in profuse sweating.
- When showering, avoid direct spraying with water from the showerhead.
- When washing you hair tilt your head backwards and don't allow shampoo or water into your newly applied tattoo.
- Only use patting movements to dry the skin on and around the area of the tattoo.

Until the Eyebrow has Healed

- Do not peel or pick at the scab, this could cause pigment loss, scarring, delayed healing and perhaps infection.
- Do not use creams that contain alcohol, anti-aging or exfoliation products on or around the wound.

- Keep fringes away from your forehead to avoid infection.
- Do not apply topical make up over the healing area of the eyebrow.
- If you are experiencing discomfort and you can tolerate ibuprofen medication, use it to reduce inflammation.
- Do not wax or tint or thread the eyebrows until at least 10 weeks after the treatment, providing of course, that your eyebrows have completely healed.
- Do not have botox treatments until 10 weeks after the procedure.
- Exfoliation treatments, chemical peels, skin lighteners and laser treatments will all prematurely fade the colour of your eyebrow pigment.
- Do not use tanning beds and avoid going out in the sun until your brows are fully healed. Protect your eyebrows from the sun by wearing sunglasses or a sun hat. Once fully healed, prevent premature fading by using a high factor UV sunblock.

“ As a general rule, clients who allow the body’s natural resources to heal the newly tattooed skin will experience better colour retention. ”

Complications to the Healing Process.

Skin characteristics change as we mature. It will normally take at least four to six weeks to heal and for the implanted pigment to be seen in the outer layers of the skin. Infills and touch up treatments should take place once fully healed, six to eight weeks. As the skin ages it takes longer to heal, therefore, we would expect an older client to have a longer healing time. We would recommend that you leave a period of eight to ten weeks before carrying out an infill procedure on a mature lady. Further treatment before the brow is fully healed may result in scarring.

Factors such as; not following recommended aftercare procedure, accidental abrasion or even diet and stress can also affect the length of time that it takes for the treatment to heal sufficiently enough to carry out infills and replacement of lines that have ‘healed out’.

Infection

Any invasive procedure has a risk of infection if not kept totally clean. It is important to wash your hands regularly and thoroughly to avoid transferring any germs to the area of the tattoo. We touch our faces instinctively, often without noticing, so if your hands are clean you are less likely to inadvertently compromise the procedure.

At the first sign of infection or allergic reaction you should contact your technician and seek medical advice. Reactions are extremely rare, when they do happen most problems are as a result of not adhering to the after care instructions or inadequate hygiene.

An occasional slight healing itch is normal. **If you experience; swelling and redness that increases around the wound, severe burning or throbbing, increasing tenderness or an unusual discharge (yellow or green) with an offensive smell. Speak to your technician and seek medical attention without delay.**



SUN EXPOSURE

Exposure to UV Radiation

Sun exposure results in the premature fading of pigment. In fact, it has an adverse effect on almost all colour, it is why paint fades, and clothes dried in direct sunlight fade.

In hotter countries (e.g. Mediterranean climates), even more caution must be taken to preserve the client's tattoo, to avoid discoloration. Even incidental exposure (e.g. riding a bike, driving a car) will take its toll on the tattoo over time. Using tanning beds without protection will have the same effect.

In permanent cosmetics, sun exposure results in an acceleration of the degradation of pigment particles, which has two undesirable effects:

- A faded (lighter) color.
- Discoloration: A color shift toward the strongest, colour base in the pigment used.

For this reason it is likely that a client may require a colour 'refresh' after a period of time. If and how soon they will require a colour refresh is dependent on a few factors:

- The colour used.
- How frequently they use sun protection product on the procedure area (and how high the SPF is).
- Facial maintenance ingredients (e.g. exfoliators).
- Professional cosmetic treatments (e.g. dermabrasion or laser).
- And most important of all... the frequency and strength of sun exposure.

Due to all the above factors, the timing of every colour refresh is very client-specific.

Understanding the detrimental effects of the sun on the skin is still not fully understood, so it is our responsibility as technicians to always remain updated on what the medical community and government agencies recommend as adequate SPF protection, so we are better able to protect and advise our clients.

SKIN TYPES

Fair-skinned people are more likely to absorb more solar energy in the base layers of the skin than dark-skinned people under the same conditions. If your client has a Fitzpatrick skin type of 1 or 2 they will be accustomed to using sun screen or limiting their exposure to UV radiation to prevent burning.

Clients with Fitzpatrick Skin Types 3 - 6 will be the hardest to convince they require sun protection. Their skin is different colours of brown and black and they may feel that, as they don't often burn, they are immune to the effects of the sun.

The effects of the sun on implanted colour will be similar, no matter which skin type

EXTREME SUN EXPOSURE

But what about extreme sun exposure? How soon is it safe to take a holiday in the sun? You'll find that it's not uncommon for a client to request a permanent cosmetic procedure shortly before going on a planned holiday.

This wouldn't be advised, in fact we wouldn't advise getting any permanent cosmetic treatment prior to any important planned event (e.g. a wedding, or a holiday). Refraining from activities conducted in extreme sun for a minimum of two weeks is recommended and preferably four is optimal.

If the client does go out in strong sunlight in the first few weeks following treatment protection from direct sunlight will be needed. Using moisturising sun protection creams may inhibit healing while the tattoo is very new, so the best option would be shade from the sun by a wide brimmed sun hat.

However, all of this doesn't imply that having a cosmetic procedure means that clients will never enjoy the pleasure of hobbies or tasks that expose them to sunlight. Merely that clients need to be made aware of these issues and encouraged to make informed decisions, to protect the investment that they have made over a long period of time.

High SPF sunscreen lotions should be used on the tattoo, once healed to prevent fading and discoloration.



FREQUENTLY ASKED QUESTIONS

Although permanent cosmetics have been around for some time, Microblading has only recently become a mainstream technique. Before, during and after the procedure, your clients will be eager to learn about the treatment and will have many questions about the outcome and how to care for their new brows.

We have listed a few of the most commonly asked questions below.

WHY DOES THE PROCEDURE APPEAR LARGER THAN THE DESIGN I APPROVED?

Answer Wounds create irritation and irritation may add to the appearance of a darker pigment colour (e.g. red skin, around brown pigment can create a purple hue). The irritation should subside in a few days.

WHEN THE IRRITATION SUBSIDES IN A FEW DAYS, WILL I SEE THE FINAL COLOUR?

Answer No, there is excess pigment trapped in the epidermis (top layer of the skin), which will shed during the healing period. The loss of pigment that occurs during the shedding process results in less pigment saturation and ultimately has a “lightening” effect on the healing of the procedure.

You may actually find that some of your lines don’t appear at all. But once the healing process is well underway, and the scabs have been shed, new skin cells will veil the colour, so that it appears lighter than anticipated. However, true eyebrow and eyeliner colours are visible on about day 28 - 35. On average, when the healing is complete eyebrows and eyeliners will appear up to two shades lighter than what is seen immediately after the procedure.

WHEN WILL THE SCABS LEAVE?

Answer Most scabs shed within the first week, but some stubborn ones can take longer (up to two weeks). Everyone’s healing process is a little different. It is important to remind your customer not to interfere (pick) the scabs - no matter how bad they look.

THE SCABS HAVE PARTIALLY LEFT AND I SEE NO COLOUR!

Answer This is very common so don’t worry. Advise your customer *before* leaving that they will likely see no color, for the first 1-2 weeks but by 3-4 weeks the ink will gradually appear on skin.

WHEN CAN I USE MY COSMETICS AND WASH MY FACE?

Answer You can wash your face thoroughly using a wet face flannel immediately. Use your soap or cleanser as normal. However, please ensure that you do not wet the area that has been newly tattooed. Similarly rinse your cloth with water and wipe the rest of the face to remove any remaining soap or cleanser.

Wait at least a week, or until the scab has lifted before wetting or washing the treatment area. You can use moisturisers such as aqueous cream after the scab has lifted and the skin is soft but avoid using any topical makeup products until advised to do so by your practitioner at your follow-up appointment after approximately six weeks.

HOW LONG WILL THE SCABS REMAIN ?

Answer Scabs will heal at different rates, therefore we can not predict exactly how long they will last.

Usually, in a healthy person the scab will come away between 7-10 days. If an immunological, chronic disease or a medical condition that affects blood clotting exists, although rare, the scab may last up to 3 to 4 weeks

IS THERE A CHANCE THAT A SCAB MAY NOT APPEAR?

Answer In rare cases, the lack of thick scab has been observed, because it appears in the form of flakey peeling skin almost like a dandruff appearance. In the absence of a scab, we should still avoid contact with the water until the texture of our skin becomes soft as the skin to the surrounding areas and dandruff like symptoms are eliminated.

WHAT SHOULD I EXPECT AFTER THE ELIMINATION OF THE FLAKEY SKIN ?

Answer After the departure of scab in many cases it has been observed a blurred or pink version of your tattoo or even complete loss of pigment. Do not panic because this is normal especially after the tattoo application using the microblading method.

WHY DOES THE BROW LOOK PINK?

Answer When placing the pigment into the epidermal and dermal layers our skin rests, the body's immune system steps in to heal the cut. Our body then recognises the pigment as a foreign body and tries to eliminate it by pushing it to the surface. At the same time the surface has started the process of injured skin regeneration which justifies the pink eyebrow. The regeneration can take from 4-8 weeks. In this period we observe daily change in colour intensity as it travels nearer towards the surface. We begin now to distinguish our tattoo with greater clarity and precision as regards the final colour and its intensity. Now we and our technician are only able to judge if we require additional hair strokes to cover any gaps caused by the loss of pigment.

WHAT SHOULD I DO UNTIL MY SECOND APPOINTMENT/TOUCH UP/ INFILL?

Answer Once the scabs have fallen and the skin texture in the region is soft and the same as the surrounding skin you can safely use water and your moisturiser, you can also use a reconstructive cream to enhance the regeneration process. You can use makeup products until they receive the desired result i.e. eyebrow or lip pencils.

HOW SHOULD I TREAT MY TATTOO NOW THAT IT HAS HEALED?

Answer It is recommended that you use sun block cream in order to protect the implanted pigment from premature discolouration due to sun exposure. Pigment will change colour with direct exposure to sunlight and this will result in premature fading or discolouration.

It is important to put moisturiser in the area that has been treated in order to keep the colour vivid. Possible dehydration of the skin will result in skin peeling and frequent exfoliation of dead cells thus reduce the life span of your tattoo or even prematurely age your tattoo with colour changes.

ARE THERE ANY PRODUCTS THAT I SHOULD AVOID USING?

Answer Do not use bleaching creams, chemicals or other exfoliating products containing retinol, fruit acids or other exfoliating and whitening substances as they will adversely affect the colour and could result in premature ageing of your tattoos appearance.

WHEN CAN I HAVE AN INFILL TREATMENT?

Answer It is advisable to make an additional appointment with your stylist to determine whether you need to place repeat session. This session should be scheduled 45-60 days after the initial application. If done earlier while the skin regeneration procedure has not been completed there is a risk of creating scarring on the already sensitive skin that has not had time to heal. There is also the risk that the final colour has not yet fully revealed and that could lead the stylist coming to the wrong conclusion about any alterations to your pigment choice. It is better to choose to fill your gaps with a cosmetic pencil rather than rush to infill.

IS THE PROCEDURE OF MY FOLLOW UP SESSION THE SAME AS THE FIRST ONE?

Answer Yes, the procedure will be the same but the duration will depend upon how much additional work needs to be carried out.

IS THERE A POSSIBILITY THAT I MIGHT NEED A THIRD SESSION?

Answer Rarely is a third session needed, unless you have very oily skin. Or if you have taken prescription medications which has adversely affected the colour. The only instance where many visits are needed is in the scenario of an old tattoo correction with discoloration (i.e. red, purple, green and blue) or shape reconstruction of an old defected tattoo, that can take up to as many as 5 visits.

HOW LONG WILL MY TATTOO LAST ?

Answer As mentioned, each individual is unique and for this reason we can not guarantee or predict the exact duration of the tattoo. It depends crucially on three factors. How oily your skin is, how large your pores are on the treatment area and whether the correct after care has been followed. A "semi - permanent" eyebrow tattoo should last up to 1-1,5 years, if you have methodically followed the after care. Beyond that time frame the tattoo will start to blur and the discolour. If you would like to reinstate the shape colour and design, this can be done on colour refreshing visits.

WHEN SHOULD I RENEW MY TATTOO AND HOW WILL I KNOW THAT IT IS TIME TO DO SO?

Answer When more of the contours and the overall picture of your tattoo is not as visible but instead the image begins to blur looking like it is shaded. If you enjoyed it and would like to refresh it you must book your annual refresher before the contours and shape completely disappear. After this time, it will be considered as a new tattoo because your technician will have to do all measurements and shaping from the beginning.



WHAT NEXT?



Post Course Requirements

Congratulations on completion of your five day attendance of Dermagraph microblading training. We all know that the key to success is practice, practice practice.!!!

To perfect your skills and qualify, you need to complete the following;

30 completed practice skins are needed prior to moving onto live models.

On each practice skin we require that you to draw 6 sets of eyebrows and infill each outline with the hair strokes practiced on your training days. These exercises will help you to muscle memory the detail that go into the eyebrow shapes and the detailed hair strokes in each area of the eyebrow.

We would like you to print, sign and date the back of each practice skin. Each skin should also be numbered to help us chart your progression. When you have completed 15 skins we request that you post them out to us to allow us to assess your progress and make recommendations. If you do find that you are having any problems we are of course contactable to give you advice and feedback.

Once all 30 practice skins have been completed we request that you carefully choose six live models to progress to. Choose models that are not going to present too many difficulties when you're starting out. Don't start with colour corrections or people with oily or combination skin.

If you have problems or questions while carrying out your case studies, please contact us for guidance, we will try to respond as quickly as possible.

For each model the following documents are needed;

- A client consent form.
- A client consultation sheet. Please note that the aftercare section needs to be signed and dated, illustrating that the client has received after care instructions and they fully understand these instructions.
- A client record card with the patch test recorded, this requires both your client and yourself to sign and date the patch test.
- Photographs of before the patch test and one week after the patch test.
- We also require photographs of your model's eyebrows prior to treatment, photographs immediately after the treatment and a photograph of the healed result six weeks later. Make sure that your photos include close-ups that are sharp and in focus so that we can properly assess the treatment and give you guidance.

If any of the above documentation is missing or incomplete we will be unable to accept the submission of the case study.

Please remember; it is both a legal and insurance requirement that you have complete records. In order for us to give you accurate feedback, it is essential that you have complied with health and safety and all of the documents need to be submitted electronically to us.

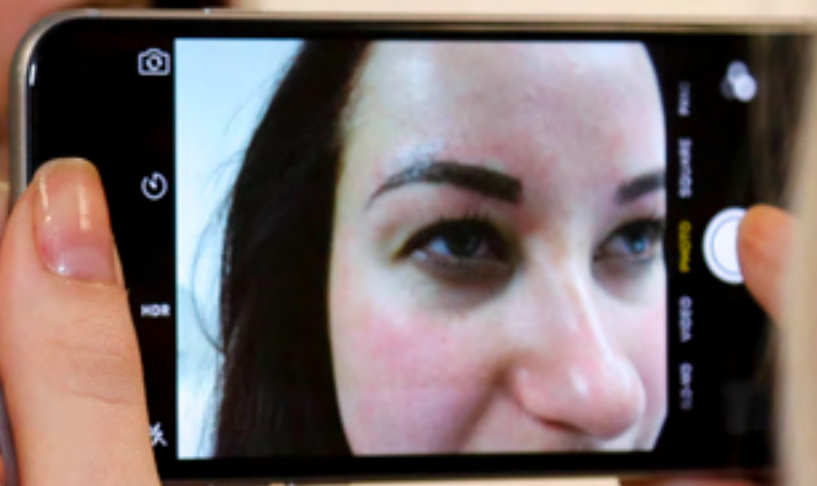
Upon successful completion of six case studies, we would like you to choose your two favorites and infill each of the models, a minimum period of six weeks needs to have elapsed prior to doing infills. For this final part of your assessment we will need to see the following documents;

- Updated client record card (please remember to check for any new medications)
- Photographs of the eyebrows prior to infill
- Photographs of eyebrows immediately after infills.
- Photographs of healed results of eyebrows.

Please read the following section carefully for guidance on how to record and submit your work.

Once we have received and assessed your final (successful) case study, we will be proud to issue your Dermagraph® Certificate of Training.

CASE STUDIES



HELP US TO HELP YOU

We can't be with you in person for your case studies so we need you to record the treatment in detail. This will allow us to assist in your progression and offer help and advice to overcome any difficulties that you may encounter. We don't expect the results of your first case studies to be perfect, it would be very unusual if they were, but we do need to see that you are following the correct and safe procedure, as taught in the class. If you document every stage of the process; the measurements that you made and the materials you used, we can then understand how you arrived at your result and offer guidance for your next case study.

The pictures of your work must be clear and sharp, to allow us to see individual hairstrokes and assess the shape and symmetry of the brows. Good pictures will also allow you to review your work from a different perspective and carry your experience forward. In the excitement following the completion of a treatment, you can feel pressured to rush when taking pictures but it is such an important part of the assessment process. Take as many as you need to ensure that your pictures accurately represent your work, review them immediately and, if they are not clear enough, take them again. See the end of this section for eyebrow photography tips.

Paperwork Requirements for Case Studies

1. The 'Contraindications & Medical History' questionnaire (FORM 1) must be completed, signed and dated by both you and your model. If there are any contra-indications a GP or Medical Consultant's written consent should be obtained before proceeding to treatment.
2. The 'Informed Consent Agreement' (FORM 2) should be completed and signed and dated. It is good practice to have your client initial each paragraph to show that the client understands and accepts each clause of the agreement. Both you and your client should sign and date the form.
3. The completed Record Card (FORM 3) showing record of patch test (72 hours prior to treatment), to be signed and dated by both you and your client.
 - a. The Record Card must show the measurements used, pigments used, and needle size. To be signed and dated by both you and your client. There should also be some additional information regarding treatment outcome. Any contra-actions should be signed and dated by both you and the model.
 - b. The Record Card should also show that the client has been given and fully understood the Aftercare Instructions (FORM 4). Remember that it is a common licensing requirement that your client be given written aftercare instructions to prevent complications after treatment.
4. A photograph of the final drawing, signed off by the client showing that they have agreed to proceed with the design that you have drawn as your template. Make sure that you record the measurements that you are working to on your agreed template. Note the measurements on the Client Record Card (FORM 3) or on a printout of the drawing so that you can refer to them at a later date.

Completing the above paperwork for each model or client should become routine for any semi-permanent make-up artist. It protects both you and your client, shows professionalism and will prove invaluable should there be some dispute or claim against you at a later date.

Record keeping will also benefit you from a business perspective, as you will be able to keep track of follow-up appointments and ensure that you know the details of your client's previous treatments. Microblading, being semi-permanent, has the potential to build you a long term income from follow-up and refresher programmes to maintain your client's brows. It could be several months between appointments so detailed written records will make your life much easier.

Photographic Requirements for Case Studies.

1. Take BEFORE PICTURES of your model with clean skin from close up, the photograph should be taken from a front-on view with the client sitting upwards and looking straight into the camera. Take additional photographs of the tail, from a side view of each eyebrow. Three photographs.
2. Take a picture of YOUR DRAWING, including lines for Length of Brow, Height of Arch and height of tail. Three photographs.
3. Take photographs of the final, agreed TEMPLATES. The key photograph should be taken from a front-on view with the client sitting up looking straight in to the camera. This is the photograph that you must ask your client to approve before proceeding to treatment, print it out, have your client sign it and file it with the client's paperwork in case of dispute. Additional photographs are required of the tail taken from a side view of each eyebrow. Three photographs.
4. Take photographs of the COMPLETED SET, the key photograph (see picture below) should be taken from a front-on view with the client sitting up looking straight into the camera. Additional photographs are required of the tail taken from a side view of each eyebrow. Three photographs.

In total, you should submit 12 clear photographs of your model for assessment. Take as many as you need to ensure that you have captured the detail of your work and send the clearest, sharpest pictures for review. If you would like some guidance on taking suitable case study pictures, please ask your trainer. If we can't clearly see the work that you have done, we can't properly assess it and help you to progress.

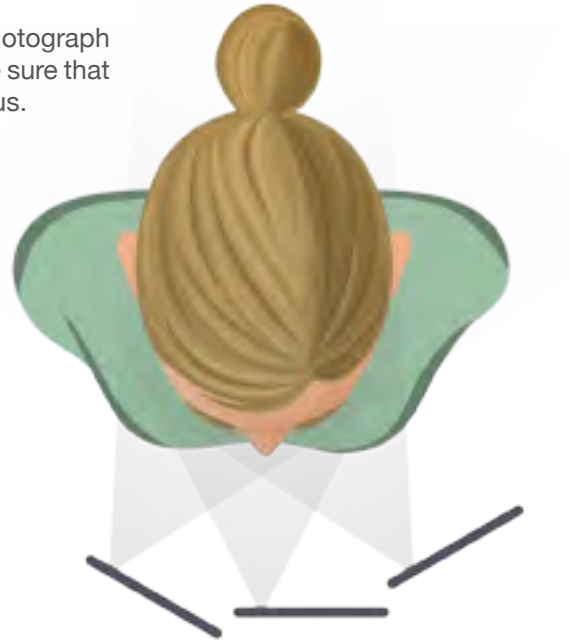
In order to comply with health and safety and insurance protocols, all of the above steps are part of the case study submission criteria. Failure to submit any of the above, invalidates your case study and will render it non-compliant with case study criteria.



At each stage of the procedure, take a front-on photograph and one slightly off to each side so that you can be sure that you have captured all of the eyebrow in sharp focus.

You may have to get very close to your model (even closer than a regular selfie) to get a shot with enough detail if you're using a smart phone camera. The camera on phones captures quite a wide angle and using the zoom function will often reduce the quality of the photograph.

Close-up photos are not very complementary but we need to see any issues to be able to tell you how to correct them.



The more light you can shine on your subject, the better and sharper your shot will be, but be careful of using a flash at such a short range. The glare from a flash may produce bright highlights that hide some of the close-up detail in the skin and brows. Use natural light, if available and, if you are in doubt, take a shot both with and without flash.

TIPS FOR SHARPER EYEBROW PHOTOGRAPHS.

Most of you will use the camera on your phone to take your case study pictures. The camera on modern smartphones is easily of good enough quality to capture the detail that we need to see in your case study pictures if you follow these steps to get the best from your camera.

- Place your model facing into the brightest light that you have available or facing a window.
- If you have to use flash, and it is creating too many highlights, you can soften it by covering with a piece of tissue.
- Remember to tap the screen to focus on the brow before shooting.
- Hold the camera steady, with your legs at shoulder width and elbows tucked against your body. Even better would be to lean against a solid object or use a camera support.
- If your camera has a self-timer function, using this will eliminate any vibration caused by pressing the button to take a picture.
- Don't use filters, they reduce detail and alter colours.
- Review your pictures and zoom in on the detail to make sure your pictures have been successful before you let your model go.
- Finally, when you send your photograph, please ensure that you send the full size version as some eMail apps will send a smaller, low resolution copy by default.

WILMA DUNN DERMAPATH

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contents



CLIENT NAME: _____

The nature and method of the proposed permanent cosmetic (cosmetic tattoo) procedure has been fully explained to me by my technician and/or by her or his associate(s) including the usual risks inherent in the tattooing process, and the possibility of complications during or following its performance.

I understand there may be a certain amount of discomfort or pain associated with the procedure and that other adverse side effects may include minor and temporary bleeding, bruising, redness or other discoloration and swelling. Additionally fading or loss of pigment may occur. Secondary infection in the area of the procedure may occur; however, if properly cared for, is rare.

- I have informed my permanent cosmetic technician and/or her or his associates of any and all existing health problems.
- I acknowledge that complications are always possible as a result of the permanent cosmetic procedure, particularly in the event my post-procedural after care instructions are not followed.
- I acknowledge that hyperpigmentation (darkening of the skin) or hypopigmentation (the absence of colour in the skin), or scarring is a possibility as a result of my body's reaction to the skin being broken during the procedure. I realise that my body is unique and that my permanent makeup technician and/or her associate(s) cannot always predict how my skin may react as a result of this procedure.
- I acknowledge the receipt of written instructions advising me of the proper aftercare of my procedures and I recognise the absolute necessity for following these instructions.
- I acknowledge that the procedure will result in a permanent change to my appearance and that no representations have been made to me as to the ability to later change or remove the results.
- I understand that future laser treatments or other skin altering procedures, such as plastic surgery, implants, and injections may alter and degrade my permanent makeup. I further understand that such changes are not the responsibility of my permanent makeup technician. I further understand that such changes in my appearance may not be correctable through further permanent makeup procedures.
- I am aware that cosmetic tattooing is not an exact science, and I acknowledge that no guarantees have been made to me as to the results of the procedure.
- I authorise my permanent cosmetic technician and/or her or his associate(s) to obtain pre-procedural and post-procedural photographs, and give her or him permission to use such photographs for publication and/or for teaching purposes, as she or he chooses.
- I am aware that the herpes simplex virus type 1 (HSV-1) (fever blisters or cold sores) may occur as a result of the lip procedure due to trauma to the lip tissue. The anticipation of an outbreak may be pre-treated with antiviral medication, available by prescription from your physician.



SEMI-PERMANENT MAKEUP

INFORMED CONSENT AGREEMENT

DERMAGRAPH®

- I understand that tattoos may cause MRI (Magnetic Resonance Imaging) artifacts and that there may be a warming and/or tingling sensation in the permanent cosmetic procedural area during the MRI due to the iron oxide (metallic salts) properties of some pigments. It is understood that I should advise my physician that I do have permanent cosmetics (a tattoo) in the event that an MRI procedure is prescribed.
- The fee for permanent makeup services has been explained to me and has been agreed upon. I understand the total fee for services rendered is due upon completion of the initial procedure(s) and that there will be separate fees for any future modification of the design(s) or major colour changes(s).
- Due to the fact that my approval is obtained prior to final selection of colour to be implanted and design application(s) to be applied, my technician employs a no refund policy.
- For some skin types and procedures, permanent cosmetics may be a multisession process. In addition to your initial application you are entitled to a post-evaluation appointment. At the post-evaluation appointment it will determine if a touch-up to the initial application is required. You must schedule your post-evaluation appointment within 7 weeks from the date of the initial procedure.
- It has been explained to me that immediately after the procedure(s) is completed, the colour will appear darker than when the procedure heals. It has also been explained that within a short period of time, during the healing process, the colour will soften.
- All colour fades - this is a fact that also applies to pigments/inks used for cosmetic tattooing. After your procedure(s) have been performed and any subsequent work performed at the post-procedure appointment, the pristine appearance of your permanent cosmetics is dependant on daily maintenance, of avoiding direct sunlight (intentional tanning), avoiding strong chemicals applied to the procedural area, and applying sun block daily (frequently if in a situation where activities take you into the sun). Colour refreshers will be needed at some point in the future. The time frame for that need cannot be predicted as this aspect of permanent cosmetics is very client specific. If the procedural area is dense enough (can be easily seen) that one application of pigment/ink will bring the colour back to its original appearance, a colour refresher fee will be charged that represents a lower charge than the fee charged for new work. If the procedural area is extremely light and only represents a weak version of the original procedure, or if it is not visible, a procedure fee for new work in effect at the appointment when the colour is reinstated will be charged.
- I have read and understand the contents of each paragraph above. I have received no unrealistic warranties or guarantees with respect to the benefits to be realised from, or consequences of, the aforementioned procedure(s)

I acknowledge by signing this consent form, I have been given the full opportunity to ask any and all questions about permanent makeup procedure(s) and process(es) from my permanent makeup technician and/or her associate(s). I have disclosed any relevant medical information or conditions that may be a contra-indication to the treatment.

CLIENT SIGNATURE: _____ **DATE:** _____

PRACTITIONER SIGNATURE: _____ **DATE:** _____



SEMI-PERMANENT MAKEUP

CONTRAINDICATIONS & MEDICAL HISTORY

1. Are you pregnant or nursing? YES ☐ NO ☐
2. Have you had any alcohol in the last 24 hours? YES ☐ NO ☐
3. Have you had caffeine drinks, caffeine supplements or energy drinks e.g red bull in the past 24 hours ? YES ☐ NO ☐
4. Do you take prescription drugs? YES ☐ NO ☐
5. Do you smoke or use any nicotine products? YES ☐ NO ☐
6. Have you had a laser or chemical peel within six months? YES ☐ NO ☐
7. Have you ever had any permanent cosmetics or tattoos applied? YES ☐ NO ☐
8. If you have permanent cosmetics or tattoos did you have any problems with healing after they were applied? YES ☐ NO ☐
9. Have you had problems with colour retention in previous tattoos? YES ☐ NO ☐
10. Have you recently had facial cosmetic surgery ? YES ☐ NO ☐
11. Do you have any scars in the proposed treatment area ? YES ☐ NO ☐
12. Do you bruise easily? YES ☐ NO ☐
13. Do you hyperpigment (darken) when the skin is compromised? YES ☐ NO ☐
14. Do you hypopigment (lighten) when the skin is compromised? YES ☐ NO ☐
15. Do you develop keloid or hypertrophic (raised) scars? YES ☐ NO ☐
16. Do you scar easily from minor skin injuries? YES ☐ NO ☐
17. Do you bleed excessively from minor cuts? YES ☐ NO ☐
18. Do you have any problems healing from small wounds? YES ☐ NO ☐
19. Do you wear contact lenses? YES ☐ NO ☐
20. Do you use Retin-A®, glycolic, or other exfoliating products? YES ☐ NO ☐
21. Do you use Latisse® or any other eyelash growth product? YES ☐ NO ☐
22. Do you have prosthetic implants? YES ☐ NO ☐
23. Do you consume Aspirin or Warfarin regularly? YES ☐ NO ☐
24. Do you have a history of cold sores/fever blisters? YES ☐ NO ☐
25. Do you have Botox® injections? YES ☐ NO ☐
26. Do you intentionally tan - direct sun or tanning bed? YES ☐ NO ☐
27. Have you ever used the acne treatment Accutane®? YES ☐ NO ☐
28. Do you have a history of skin sensitivities? YES ☐ NO ☐
29. Do you have allergies to topical makeup? YES ☐ NO ☐
30. Have you ever had an allergic reaction to any of the following products; (A)Bacitracin, Neomycin, Polymycin and Lanolin (these can be ingredients of topical and antibiotic creams) or propylene glycol ? YES ☐ NO ☐

CONTRAINDICATIONS & MEDICAL HISTORY

31. Are you allergic or sensitive to any metals, for instance, metals used for jewellery, i.e. Nickel. YES ☐ NO ☐
32. Are you sensitive to petroleum-based products? YES ☐ NO ☐
33. Do you have an allergy to latex? YES ☐ NO ☐
34. Are you allergic to eyelash/eyebrow or hair tints? YES ☐ NO ☐
35. Are you sensitive or allergic to hand creams or body lotions? YES ☐ NO ☐
36. Do you have dry eyes? YES ☐ NO ☐
37. Are you menstruating? YES ☐ NO ☐
38. Have you ever experienced problems being anaesthetised? YES ☐ NO ☐
39. Have you ever had a reaction to Novocaine or Lido caine ? YES ☐ NO ☐
40. Do you have abnormally high or low blood pressure? YES ☐ NO ☐
41. Do you have any seizure related conditions? YES ☐ NO ☐
42. Do you have a tendency to become faint or dizzy? YES ☐ NO ☐
43. Do you have a history of cancer? YES ☐ NO ☐
44. Are you underdoing radiation or chemotherapy treatment? YES ☐ NO ☐
45. Do you have a history of stroke or heart attack? YES ☐ NO ☐
46. Do you have any other heart conditions? YES ☐ NO ☐
47. Do you have a pacemaker or any or medical implant? YES ☐ NO ☐
48. Are you diabetic? YES ☐ NO ☐
49. Are you anaemic? YES ☐ NO ☐
50. Do you have Glaucoma ? YES ☐ NO ☐
51. Do you have a Thyroid condition ? YES ☐ NO ☐
52. Do you suffer from Alopecia ? YES ☐ NO ☐
53. Do you have any auto-immune disorders? YES ☐ NO ☐
54. Have you ever been diagnosed with Hepatitis B/C or HIV? YES ☐ NO ☐
55. Do you have any skin conditions such as Scleroderma ? YES ☐ NO ☐
56. Do you have Lupus ? YES ☐ NO ☐
57. Do you suffer from Acne, Dermatitis, Eczema or Psoriasis? YES ☐ NO ☐
58. Are you 18 years old or over ? YES ☐ NO ☐
59. I have no medical conditions other than disclosed above. YES ☐ NO ☐

FIRST NAME (CAPITALS): _____

SURNAME (CAPITALS): _____

SIGNATURE: _____ DATE: _____

PRACTITIONER SIGNATURE: _____

5. DO YOU SMOKE OR USE ANY NICOTINE PRODUCTS?

Answer:

Depending on the amount of tobacco used, it can cause the prospective client to heal slower than someone who does not use tobacco. Schedule the follow-up/touch-up visit one to two weeks further out than normally would be scheduled for a healthy non-smoking client of the same age. The whole reasoning here is to make sure the skin is well healed before any touch-up procedures are performed.

6. HAVE YOU HAD A CHEMICAL OR LASER PEEL WITHIN THE LAST SIX MONTHS?

Answer:

Chemical and laser peels thin the epidermal layers of the skin. Those who have had these peels may also have very sensitive skin if the treatment was recent. If the treatment was within the past six months, ask them to consult with their provider to determine if their skin is in good condition for permanent cosmetics. The laser and peel treatments do not normally directly affect the actual tissue you will be working on; providers typically do not use the chemicals or lasers in the eyebrow, lash line, around the eyes or on the lips. However, to perform permanent cosmetic procedures, technicians must stretch the skin surrounding these areas and do not want to cause any skin irritation or hyperpigmentation by doing so.

7. HAVE YOU EVER HAD ANY PERMANENT COSMETICS OR TATTOOS APPLIED?

Answer:

A yes answer to this question is an open door to enquire and observe as to how the prospective client healed, if the procedure(s) resulted in any scar tissue, and how the pigment in the tattoo or permanent cosmetic procedure appears now.

8. IF YOU HAVE PERMANENT COSMETICS OR TATTOOS DID YOU HAVE ANY PROBLEMS WITH HEALING AFTER THEY WERE APPLIED?

Answer:

Previously applied permanent cosmetics or tattoos are a good indication of a prospective client's healing properties and ability to maintain the implanted pigment, unless they were applied many years ago and her or his health profile has since changed. The body's ability to heal changes over time and current health conditions may deem a yes answer to this question impractical to use as a guide for determining if a prospective client heals well now from tattooing.

9. HAVE YOU HAD PROBLEMS WITH COLOUR RETENTION IN ANY PREVIOUS TATTOOS?

Answer:

If the answer is yes, please investigate the reasons, i.e. UV exposure, oily skin, medication. Semi permanent make up is not a suitable treatment for everyone and any previous problems should be investigated to avoid disappointment for both the client and technician.

10. HAVE YOU RECENTLY HAD FACIAL COSMETIC SURGERY ?

Answer:

We would recommend that you do not do any microblading procedures on someone who has recently had facial cosmetic surgery. The cosmetic surgery treatment would need to have fully healed to avoid risk of any infection or rejection of pigment. This may take 2-6 months. We recommend that you get a sign off from the client's doctor consenting to the treatment.

30. HAVE YOU EVER HAD AN ALLERGIC REACTION TO ANY OF THE FOLLOWING PRODUCTS; BACITRACIN, NEOMYCIN, POLYMYCIN AND LANOLIN (THESE CAN BE INGREDIENTS OF TOPICAL AND ANTIBIOTIC CREAMS) OR PROPYLENE GLYCOL?

Answer:

Bacitracin, Neomycin, Polymycin and Lanolin (these can be ingredients of topical and antibiotic creams) or propylene glycol ? is often used in pigments as a preservative or stabiliser. Ask the client to speak to their local pharmacist requesting a cream that does not contain any of the ingredients mentioned

It is essential that you ask your client to describe their reactions, i.e. huge inflammatory reaction, hives, allergic dermatitis, anaphylactic reaction (difficulty breathing) or fainting. If your clients has had any of the above allergic reactions to any products that you are going to use, the treatment should be declined.

31. ARE YOU ALLERGIC OR SENSITIVE TO ANY METALS, FOR INSTANCE, METALS USED FOR JEWELRY?

Answer:

Most pigments contain iron oxide materials, which are metallic salts. If a prospective client answers yes to this question, technicians have the option of conducting a pigment (skin) test with the pigment selected for the procedure prior to proceeding. *Note:* Many people are allergic to nickel. This is not unusual. Tattoo needles contain a small amount of nickel. If a person can wear jewelry made of gold, silver, etc., but reports itching from inexpensive earrings or other jewelry, a yes answer under these circumstances normally indicates a minor reaction to the metal nickel. An option is to advise clients of the nickel content in the needles and tell them if they experience slight itching, it will in all likelihood be as a result of skin contact with the needles used during the procedure, and that it will subside. Unless the client reports previous acute allergic dermatitis it is usually okay to proceed.

32. ARE YOU SENSITIVE TO PETROLEUM-BASED PRODUCTS?

Answer:

Vaseline, vitamin A&D ointments, and other over-the-counter products are commonly provided or suggested aftercare ointments. If a prospective client is sensitive to petroleum, technicians will want to suggest a nonpetroleum-based product. If the prospective client is sensitive to lanolin, check the labels of aftercare single-use packages (if it is policy to provide an aftercare ointment to clients) to ensure the prospective client will be receiving a product that will cause skin allergy or irritation. Because healing ointments are just a part of life, ask the prospective client what she or he normally uses for minor injuries and advise accordingly before the procedure is conducted so that the proper aftercare ointment may be provided or suggested. There are petroleum and lanolin-free products available.

33. DO YOU HAVE AN ALLERGY TO LATEX?

Answer:

Latex protein is found in latex gloves and can cause immediate hives (urticaria) or a more delayed contact dermatitis, or a more serious health condition. Technicians should have nitrile gloves on hand for these occasions if they don't already use them.

WATCH LIST OF COMMONLY PRESCRIBED MEDICATIONS

This list is intended only as an illustration of medications that are commonly prescribed for conditions that could be a contraindication to the treatment.

If your client is taking any of these medications it does not automatically exclude her from treatment but it does indicate that she should seek medical consent before proceeding. Either due to the side effects of the medication or the condition that it was prescribed to treat.

This is a list of trade names and the same medicines may be marketed under different names in different countries. There are also other medicines used to treat the same conditions. If you are unsure, request that your client seek professional advice. In the interests of safety, always maintain professional standards by asking your client to obtain written medical consent prior to application. Without training to diagnose a medical condition, the responsibility must be passed to medical professionals.

Antibiotics

Amoxicillin
Erythromycin.
Cephalexin
Metronidazole
Tetracycline
Penicillin
Augmentin

Antihistamine

Claritin
Chlopheniramine
Sudafed
Piriton
Xoyol

Anti Depressants

Amitriptyline
Prozac
Citalopram
Valium

Anti Viral

Zovirax
Famvir

Asthma

Beclomennntasone
Budesonide
Ciclesonide
Fluticasone

Oral Contraceptives

Microgynon
Rigevidon
Ovranette
Loestrin 20

Heart Medication

Atenolol
Cardizem
Lanoxin
Nifedipine
Plavix
Verapamil

Diabetes Medication

Actos
Avandia
Glipizide
Metforminn
Glyburdie

Blood Pressure

Clonidine
Lotrel
Norvasc
Propanolol
Zestril
Benzaepiril
Valsartan

Hormone Medication

Climara

Estrace

Estraderm

Medroxyprogesterone

Oestrodose

Lipid Control Medication

Pravachol
Lipitor
Zocor

Thyroid Medications

Synthroid
Levothroid
Levoxyl

Steroids

Hydrocortisone
Prednisone
Methylprednisolone

Seizure Medication

Dilantin
Neurontin
Topamax

Cystic Acne Medication

Isotrinion
Accutane

Skin Abnormalities - Lesions and Skin Cancer

Below is an illustration of skin cancers and abnormal skin cells. It, of course, would not be advisable to tattoo over any lesion or skin abnormality. In some countries there is legislation forbidding the tattooing of pre existing skin lesions.



If you notice any abnormality on a prospective client's skin at the client consultation, you would not proceed to tattoo. You should maintain your professional integrity and direct your client to seek a medical diagnostic opinion and confirmation in writing from a medical professional on whether or not it is safe to proceed. The doctor's written consent should be stored with your client record card and client consultation sheet.

Remember, it is not our responsibility to diagnose a client, we should also never alarm the client by giving an uninformed opinion. Not all abnormal cell structures in the skin are cancerous or linked to a medical condition, many lesions that occur on the skin are benign and pose no health risk. It needs professional medical diagnosis to establish whether any lumps, bumps or patches need medical attention.

Licenses and Permissions for Semi Permanent Makeup

In the UK, there are no recognised countrywide regulations for tattooing or permanent makeup nor any qualification or code of practice. The government endorsed Hair and Beauty Industry Authority, HABIA is working on a code of practice but there has been no date released for its publication.

In the meanwhile, responsibility for approving and administering licences for technicians and premises falls to local authorities. Most have based their bylaws on the Local Government (Miscellaneous Provisions) Act 1982 but you should check with your local council for their licensing requirements for 'special treatments' or 'semi-permanent skin colouring', these are the terms used in the legislation.

Here are the relevant paragraphs of the Model Byelaws covering so-called special treatments as they apply to gaining a licence for a treatment premises and technician. You can also be licensed as a mobile operator without premises but the same standards of cleanliness still apply (SEE SECTION 5 below).

2-1 For the purpose of securing the cleanliness of premises and fittings in such premises a proprietor shall ensure that—

- (a) any internal wall, door, window, partition, floor, floor covering or ceiling is kept clean and in such good repair as to enable it to be cleaned effectively;
- (b) any waste material, or other litter arising from treatment is handled and disposed of in accordance with relevant legislation and guidance as advised by the local authority;
- (c) any needle used in treatment is single-use and disposable, as far as is practicable, or otherwise is sterilized for each treatment, is suitably stored after treatment and is disposed of in accordance with relevant legislation and guidance as advised by the local authority;
- (d) any furniture or fitting in premises is kept clean and in such good repair as to enable it to be cleaned effectively;
- (e) any table, couch or seat used by a client in the treatment area which may become contaminated with blood or other body fluids, and any surface on which a needle, instrument or equipment is placed immediately prior to treatment has a smooth impervious surface which is disinfected immediately after use and at the end of each working day.
- (f) any table, couch, or other item of furniture used in treatment is covered by a disposable paper sheet which is changed for each client;
- (g) no eating, drinking, or smoking is permitted in the treatment area and a notice or notices reading "No Smoking", and "No Eating or Drinking" is prominently displayed there.

(2) Where premises are registered under section 14(2) (acupuncture) or 15(2) (tattooing, semi-permanent skin-colouring, cosmetic piercing and electrolysis) of the 1982 Act, a proprietor shall ensure that treatment is given in a treatment area used solely for giving treatment;

(3) Where premises are registered under section 15(2) (tattooing, semi-permanent skin-colouring and cosmetic piercing) of the 1982 Act, a proprietor shall ensure that the floor of the treatment area is provided with a smooth impervious surface;

3.—(1) For the purpose of securing the cleansing and so far as is appropriate, the sterilization of needles, instruments, jewellery, materials and equipment used in connection with treatment—

- (a) an operator shall ensure that—any gown, wrap or other protective clothing, paper or other covering, towel, cloth or other such article used in treatment—
 - (aa) is clean and in good repair and, so far as is appropriate, is sterile;
 - (bb) has not previously been used in connection with another client unless it consists of a material which can be and has been adequately cleansed and, so far as is appropriate, sterilized.
- (ii) any needle, metal instrument, or other instrument or equipment used in treatment or for handling such needle, instrument or equipment and any part of a hygienic piercing instrument that touches a client is sterile; any container used to hold dye for tattooing or semi-permanent skin-colouring is either disposed of at the end of each treatment or is cleaned and sterilized before re-use.

a proprietor shall provide—

- (i) adequate facilities and equipment for cleansing; and sterilization, unless only pre-sterilized items are used. (ii) sufficient and safe gas points and electrical socket outlets;
- (iii) any jewellery used for cosmetic piercing by means of a hygienic piercing instrument is sterile;
- (iv) any dye used for tattooing or semi-permanent skin-colouring is sterile and inert;
- (iii) an adequate and constant supply of clean hot and cold water on the premises;
- (iv) clean and suitable storage which enables contamination of the articles, needles, instruments and equipment mentioned in paragraphs 3(1)(a)(i), (ii), (iii), (iv) and (v) to be avoided as far as possible.

4. —(1) For the purpose of securing the cleanliness of operators, a proprietor—

(a) shall ensure that an operator—

- (i) keeps his hands and nails clean and his nails short;
- (ii) keeps any open lesion on an exposed part of the body effectively covered by an impermeable dressing;
- (iii) wears disposable examination gloves that have not previously been used with another client, unless giving acupuncture otherwise than in the circumstances described in paragraph 4(3);
- (iv) wears a gown, wrap or protective clothing that is clean and washable, or alternatively a disposable covering that has not previously been used in connection with another client;
- (v) does not smoke or consume food or drink in the treatment area; and shall provide—
 - (i) suitable and sufficient washing facilities appropriately located for the sole use of operators, including an adequate and constant supply of clean hot and cold water, soap or detergent; and
 - (ii) suitable and sufficient sanitary accommodation for operators.

(2) Where an operator carries out treatment using only a hygienic piercing instrument and a proprietor provides either a hand hygienic gel or liquid cleaner, the washing facilities that the proprietor provides need not be for the sole use of the operator.

(3) Where an operator gives acupuncture a proprietor shall ensure that the operator wears disposable examination gloves that have not previously been used with another client if—

- (a) the client is bleeding or has an open lesion on an exposed part of his body; or
- (b) the client is known to be infected with a blood-borne virus; or
- (c) the operator has an open lesion on his hand; or
- (d) the operator is handling items that may be contaminated with blood or other body fluids.

5. A person registered in accordance with sections 14 (acupuncture) or 15 (tattooing, semi-permanent skin-colouring, cosmetic piercing and electrolysis) of the Act who visits people at their request to give them treatment should observe the requirements relating to an operator in paragraphs 3(1)(a) and 4(1)(a).

As you can see, although written in legal terms, licensing requirements are pretty straightforward and are concerned with the cleanliness of the premises, equipment and operator. For the purposes of infection control this should be part of your standard working practice anyway.

More information and details of your local authority can be found on the UK Government website.. www.gov.uk/skin-piercing-and-tattooing.

The following section contains a self-assessment audit, issued by the Health Protection Agency in 2011. Many local authorities will ask that you complete this form prior to inspection.



INFECTION CONTROL AUDIT FOR SPECIAL TREATMENT PREMISES

- This audit tool aims to assist the licensee in meeting the standards of hygiene and safe practice necessary to protect the public and the operator from contracting and spreading infections.
- It is understood that the licensee will work towards those standards whilst also meeting the conditions of their license as set up by their local authority.
- The licensing officer may request the self-assessment audit to be completed prior to inspection.
- The rationale for the standards can be found in '*Special Treatments Guidelines for London*'.

LICENCEE'S NAME:

OPERATOR'S NAME:

NAME AND ADDRESS OF PREMISES:

TELEPHONE NUMBER:

	YES	NO
Tattooing		
Body Piercing		
Micro pigmentation		
Nail Fashion		
Acupuncture		
Other:		

Review date:

Carried out by (name of therapist/licensee):

Aims:

To protect the public and the operator from contracting and spreading infections

To assist proprietors and operators achieve the best possible infection control practices

STANDARDS:	page
Standard 1: Hands are washed correctly to reduce the risk of cross infection	3
Standard 2: The practice environment is appropriately maintained to reduce the risk of cross infection	3
Standard 3: Waste is disposed of safely, according to current waste management regulations	4
Standard 4: Sharp instruments are handled safely to reduce the risk of injury.	4
Standard 5: Products and equipments are used according to manufactures instructions and meet UK standards.	5
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Standard 7: Policies give guidance on good practice	6
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INFECTION CONTROL AUDIT FOR SPECIAL TREATMENT PREMISES

Health Protection Agency

Standard	Yes	No	N/A	Comments
1. Hands are washed correctly to reduce the risk of cross infection				
Hands washing facilities include:				
• Designated clean sink with hot water				
• Liquid hand soap dispenser				
• Paper towel dispenser				
• Foot operated bin				
• Hand washing poster				
2. The practice environment is appropriately maintained to reduce the risk of cross infection				
<ul style="list-style-type: none"> • All general areas are clean and in good repair. • Light and well ventilated. • Easy access and uncluttered. • Designated areas for different activities. • Surfaces are easy to clean (includes flooring). • Staff facilities (toilets and kitchen) are clean and tidy. 				
• Cleaning schedule is adhered to.				
<ul style="list-style-type: none"> • Couches/chairs are in good state of repair, impervious to water and easy to clean. • They are covered with disposable paper sheets changed after each client. 				
• The dust extraction system is fully functional.				
• Cleaning equipment (mops, bucket, wipes and cleaning products) is kept in good order, renewed regularly and stored safely in a designated area.				

Standard	Yes	No	N/A	Comments
3: Waste is disposed of safely according to current waste management regulations and without risk of contamination or injury				
• The operator has written instructions on the safe disposal of waste.				
• Appropriate coloured bags are used for disposal of offensive waste.				
• Used gloves, aprons, dye containers, swabs, dressings disposed of as offensive waste				
• Offensive waste and domestic waste are segregated.				
• Waste bags are less than $\frac{3}{4}$ full and securely tied.				
• Offensive waste is stored in a designated area prior to disposal.				
• Offensive waste storage area is locked and inaccessible to unauthorised persons and pests.				
• The offensive storage area is marked with a biohazard sign.				
• Offensive waste bags are labelled with the number and full post code of the premises.				
• Collection of offensive waste is undertaken weekly with a registered waste management company.				
• Waste transfer notes are kept on site.				

4. Sharp instruments are handled safely to reduce the risk of injury.				
• Sharps bins are available for use and located within easy reach of operator.				
• Sharps bins are stored above floor level, below eye level and safely out of reach of children and visitors.				
• Sharps bins conform to British Standard BS7320/UN3291.				
• Sharps bins are less than $\frac{3}{4}$ full with no protruding sharps.				
• Sharps bins are assembled correctly and the lid is secure.				
• The labels on sharps bins are completed.				
• Used razors are not re-sheathed.				
• Sharps bins are stored in a designated area prior to disposal.				

INFECTION CONTROL AUDIT FOR SPECIAL TREATMENT PREMISES

Health Protection Agency

Standard	Yes	No	N/A	Comments
5. Products and equipments are used according to manufactures instructions and meet UK standards.				
<ul style="list-style-type: none"> Chemical detergents/disinfectants and autoclave/ultrasonic bath fluids are used in accordance with the manufacturers' instructions and stored safely. 				
<ul style="list-style-type: none"> Risk assessments/ data sheets are available in accordance with Control of Substances Hazardous to Health (COSHH) regulations. 				
<ul style="list-style-type: none"> Products such as inks, creams, lotions, nail varnish, etc are acquired through a reputable source/ suppliers and meet with UK standards. 				
<ul style="list-style-type: none"> All equipments including disposables and jewellery are acquired through reputable suppliers and meet with UK standards. 				

6. Protection from Blood Borne Viruses				
<ul style="list-style-type: none"> Staff have been taught in the correct use of gloves, aprons and goggles (PPE) 				
<ul style="list-style-type: none"> Staff are aware of what to do if there is a sharps injury or any body fluid splash. 				
<ul style="list-style-type: none"> Operators are aware of the procedure for dealing with blood spillage. 				
<ul style="list-style-type: none"> Chlorine/bleach or disinfectant able to kill blood borne viruses is available for cleaning up blood spillage. 				
<ul style="list-style-type: none"> 70% isopropyl alcohol wipes are used to clean clients' skin prior to the procedure. 				
<ul style="list-style-type: none"> Best practice is that staff have documentation, in the form of a blood test result, showing they have been successfully vaccinated against hepatitis B. If the member of staff is not immune to hepatitis B, best practice should be that there is documentation, in the form of a blood test, showing they are not infectious hepatitis B carriers. 				

Comments:

Blood test results following hepatitis B vaccinations	
Hepatitis B surface antibody levels	Staff status
more than 100 IU/ml	Successful response to the vaccination. The individual is immune.
10 -100 IU/ml	Partial response. The individual requires an additional dose of vaccine.
below 10 IU/ml	Poor or no response. The individual is a non-responder and is <u>not</u> immune*.

Standard	Yes	No	N/A	Comments
7. Policies give guidance on good practice				
<i>The following policies or management check lists are available:</i>				
• Hand washing				
• Cleaning (should include what needs to be cleaned, when the cleaning is to be done and which chemicals are to be used)				
• Decontamination and sterilisation				
• Waste management				
• Management of blood spillages				
• Use of personal protective equipment				
• Procedure following a sharps or splash injury				
• Sharps handling/ disposal				
• Policies are reviewed regularly and are kept up to date				

Comments:

Policies can be checklists.

8. Clients' information is recorded and stored according to data protection requirements.				
• Records are kept of client information in a locked and secure place.				
• <u>Client records include:</u> <ul style="list-style-type: none"> ○ Name ○ Address ○ Date of birth and Age ○ Proof of identification - if needed ○ Part of body to be treated ○ Medical history ○ Signed consent form ○ Name of the practitioner ○ Date of the procedure 				
• Clients are given verbal after care information.				
• Clients are offered written after care information.				
• Client information is in a language understood by both operator and client.				

INFECTION CONTROL AUDIT FOR SPECIAL TREATMENT PREMISES

Health Protection Agency

Standard	Yes	No	N/A	Comments
9. Equipment and instruments are decontaminated and stored correctly to reduce the risk of cross infection				
Name of autoclave: serial nb:				
Year of purchase				
<ul style="list-style-type: none"> • Vacuum autoclave • Front loading bench-top autoclave • Maintenance/ breakdown contract 				
Records show :				
<ul style="list-style-type: none"> • regular maintenance programme • daily autoclave cycles 				
<ul style="list-style-type: none"> • Only trained staff are permitted to use the autoclave 				
<ul style="list-style-type: none"> • Autoclave is clean and in a good state of repair 				
<ul style="list-style-type: none"> • Water is drained from autoclave daily • 				
<ul style="list-style-type: none"> • All unwrapped autoclaved equipment/instruments are used as soon as possible 				
<ul style="list-style-type: none"> • Ultrasonic bath is used with a lid on • 				
<ul style="list-style-type: none"> • Items are rinsed after being removed from the ultrasonic bath 				
<ul style="list-style-type: none"> • Ultrasonic bath is emptied and cleaned daily and kept dry overnight 				
<ul style="list-style-type: none"> • Used, contaminated equipment is stored in a labelled container 				
<ul style="list-style-type: none"> • For micro pigmentation machines with non disposable/non-replacement/non-sterilisation parts, the HSE/HELA LAC No 14/1Cosmentic Treatment '5 step cleaning/disinfection process' is followed after ultrasonic bath cleaning 				

Standard	Yes	No	N/A	Comments
10: Body piercing and tattooing specific audit section				
Protective disposables for the operator				
• Non-powdered latex and non-latex gloves				
• Plastic aprons				
• Face masks and goggles				
Protective disposables for the equipment				
• Tattoo motors and clipcords are covered with plastic which is renewed between clients				
Single use equipment				
• Disposable razors				
• Single use marker pens are used for free hand or large tattooing sites				
• Single use containers/tubes of lotion				
• Single use disposable dye containers				
• Elastic bands used on tattoo motors are changed between clients				
• Tattoo stencils are single use				
Equipment autoclave in between each client/ each use				
• Re-usable needle bars				
• Re-usable equipment cleaning brushes				

INFECTION CONTROL AUDIT FOR SPECIAL TREATMENT PREMISES

Health Protection Agency

AUTOCLAVE DAILY RECORD SHEET

Please keep these records in date order for inspection

Autoclave Type

Serial Number

..

.

Week Commencing

Location

...

.

Type of Water used

..

<i>Daily test</i>	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Cycle Counter Number							
Time to reach holding temp							
Temp during holding period							
Pressure during holding period							
Total time at holding temp/pressure							
Water drained at end of day							
Process check							
Printout attached							
Initials of authorised user							

Weekly Safety Test	Yes/No	Comments
Door seals secure		
Door safety devices functioning correctly		
Safety Valves operating correctly		
Comments		
Name	Date	Signature

PLEASE KEEP THESE RECORDS IN A RING BINDER FOR INSPECTION.

SUMMARY OF LEGISLATION

If you already operate a beauty salon in the UK you will probably be aware of legislation that applies to businesses offering beauty services. There are, however, additional acts that apply to businesses offering 'special treatments' such as semi permanent makeup. From our research we have found that legislative measures around the world are very similar, usually licensed on a local or state level like the UK, and with very similar requirements. You must check to see who is your local licensing authority and ask for an information pack when you make your licence application.

Here is a summary of relevant legislation in the UK that you should be aware of.

Tattooing of Minors Act 1969

This law makes it an offence to permanently tattoo anyone under the age of 18

The Health & Safety at Work Act 1974

This law requires employers and the self-employed to look after the health and safety of themselves, their employees and anyone else that may be affected by their activities.

The Management of Health & Safety at Work Regulations 1999

These regulations require you to carry out risk assessments on any activities that you undertake and take steps to minimise any risk to yourself, employees or clients.

Workplace Regulations 1992

This applies to all types of business and basically requires you to keep your workplace in a safe condition, look after the welfare of your employees and dispose of waste safely.

Supply of Goods and Services Act 1982

This act requires a trader who agrees to provide a service to carry out that service with reasonable care and skill and in a timely manner. It also stipulates that any materials used are of satisfactory quality. If the trader fails to meet these requirements, the law treats it as breach of contract.

Local Government (Miscellaneous Provisions) Act 1982

Local Government Act 2003

The 1982 Act gives the framework to local authorities to make byelaws to regulate tattooing. The 2003 act extends this to cover micropigmentation and all forms of semi-permanent makeup.

Each local authority can introduce their own laws but, in practice, they follow the model byelaws in the Act (see page 148). These set the standards for hygiene of premises and registered operators and allow for the local authority to issue licences.

Greater London Council (General Powers) Act 1981

London Local Authorities Act 1991

These Acts cover the London Boroughs and require the registration of premises and technicians offering 'special treatments' such as tattooing, semi-permanent makeup and micro-pigmentation.

RECORD KEEPING

If you are self-employed or employ less than 5 people, the legal requirement to keep records is minimal but it's worth noting that; if you ever end up in a legal dispute, good record keeping will very much count in your favour.

- If you have more than 4 employees, under COSHH (Control of Substances Hazardous to Health Regulations 1999) you must make an assessment of any dangerous substances (including potentially infected blood and body fluids) that you deal with in your business.
- Your Autoclave sterilisation and maintenance records.
- Treatments given to clients, with dates and contra-indications (client record card)
- Suppliers and product batch numbers.

Template protocol for environmental cleaning of premises

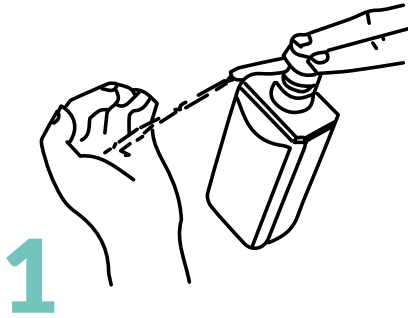
ITEM	FREQUENCY	METHOD
High risk treatment surfaces	After use	Treatment area surfaces cleaned and dried between clients using detergent and then disinfected using a bleach solution (1000 ppm) Use disposable cloths/paper towels
Non high risk surfaces	At least daily	Use general-purpose detergent Dry thoroughly Use disposable cloths/paper towels
Hand wash basins and sinks	Daily	Standard detergent
Floors	Daily	Mop with water and detergent Disinfectant is required only after contamination with blood spillages
Bins	As required	Empty bins daily. If contaminated, clean with water and detergent and then disinfect
Couches	Between clients	Wipe with hot, soapy water and dry thoroughly Clean with disinfectant against blood borne viruses if contaminated with blood
Walls/ceilings	As required	Routine cleaning not required Clean periodically with water and general purpose detergent Clean with disinfectant against blood borne viruses if contaminated with blood

Adapted from National Patient Safety Agency (2009). The Revised Healthcare Cleaning Manual.

HAND WASHING PROCEDURE



Duration of the entire procedure is 20 - 30 seconds



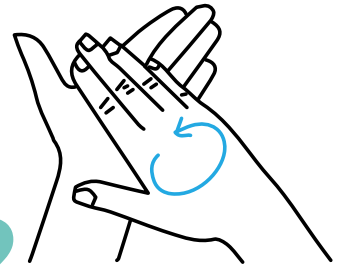
1

apply a palmful of the product into a cupped hand and cover all surfaces



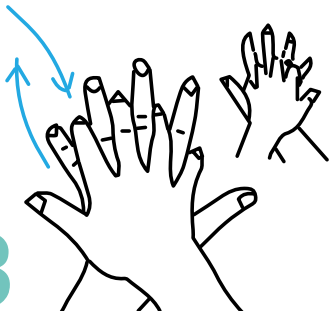
2

rub hands palm to palm



3

right palm over left dorsum with interlaced fingers and vice versa



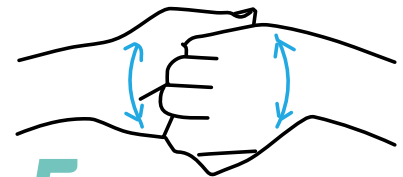
4

palm to palm with fingers interlaced



5

backs of fingers to opposing palms with fingers interlocked



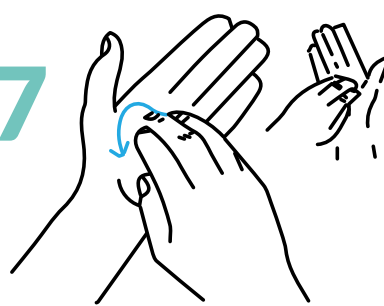
6

rotational rubbing of left thumb clasped in right palm and vice versa



7

rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa



8

once dry, your hands are safe

SAFE USE & DISPOSAL OF SHARPS

Before Use:

- Ensure that sharps disposal box is correctly assembled.
- Ensure that the label on the box is filled in upon assembly.
- Ensure appropriate colour sharps box lid for use based on medicinal contamination and how the waste should be treated and disposed of i.e. orange lid for sharps derived from tattooing/body piercing procedures.
- Sharps boxes are type approved for solids and should not be used for quantities of liquid waste.
- Sharps boxes must comply with UN 3291 and BS7320 standards.
- Boxes must be available in different sizes. Tamper-proof sharps containers are also available.
- Boxes must be available at all locations where sharps are used.
- Boxes must never be placed on the floor.
- Boxes must be placed on a level surface or wall-mounted below shoulder height and be near to the area they are being used.
- Boxes must never be left in areas where clients may have open access to them.
- Assess, in terms of risk, the most appropriate size of sharps container for the tattoo/body piercing setting.

During use:

- Practitioners must be competent in procedures using sharps.
- The person using the sharp is responsible for disposing of it.
- Never pass sharps from hand to hand. wear appropriate personal protective equipment (gloves at a minimum).

- Assemble devices with care.
- Do not disassemble devices (e.g. needle bar and needle)—dispose of as a complete unit.
- Do not re-sheath/recap used needles/razors.
- Close sharps box opening (temporary closure device) between uses.
- Never move an open sharps box. • Use the handle to carry.

After Use:

- Disposal of sharps is the responsibility of the user.
- Dispose of sharps immediately after use.
- Do not bend or break needles before disposal (e.g. a tattoo needle from a needle bar).
- Do not leave full sharps boxes for disposal by other staff.
- Fill sharps boxes only to the 'fill' line and never overfill.
- Shut and lock box when full for disposal.
- Never use tape to seal sharps boxes.
- Label box with source such as name of person/ premises and describe waste content.
- Dispose of sharps boxes as clinical waste for incineration only.
- Never place sharps boxes in clinical/ offensive waste bags.
- Sharps containers must never be left unsupervised. They must be locked in a cupboard/ operating/procedure room when not in use.
- Never try and retrieve items from a sharps container.
- Place damaged sharps containers inside a larger container – lock and label prior to disposal. Do not place inside a waste bag.

REFERENCE

National Institute for Clinical Excellence (NICE) (2012). *Infection control: Prevention and control of healthcare-associated infections in primary and community care (CG139)*.

DISPOSAL OF CONTAMINATED WASTE

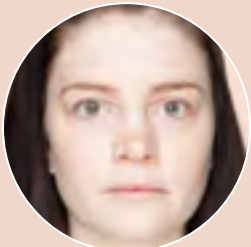
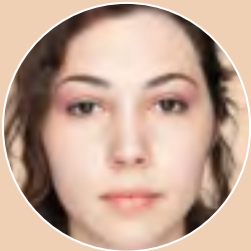





Apart from the obvious hazards associated with 'sharps' (Group B clinical waste) we will also produce a lot of contaminated waste from our disposable protection products. Any items contaminated by human tissue is categorised as Group A clinical waste by the Environmental Protection Act 1990 and the Controlled Waste Regulations 1992.

We are obliged to deal with quantities of contaminated waste over 7kg responsibly and not place it along with our general rubbish. The waste must be sealed into yellow bags and then transported and disposed of by a contractor licensed to handle Group A clinical waste or taken to an approved disposal site. For help in disposing of your contaminated waste and finding a suitable contractor, you should contact the Environment Agency or your Local Authority.

Here is some guidance from the Chartered Institute of Environmental Health on how to safely handle and dispose of your waste.

GOOD WASTE HANDLING PRINCIPLES:

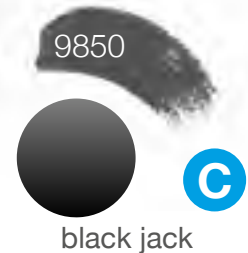
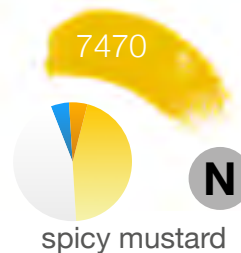
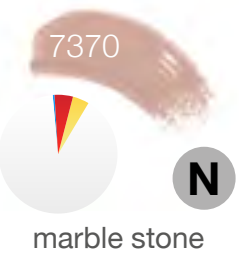
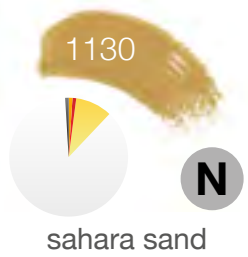
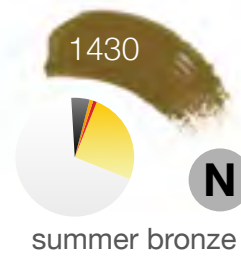
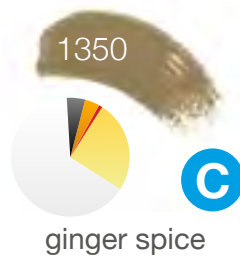
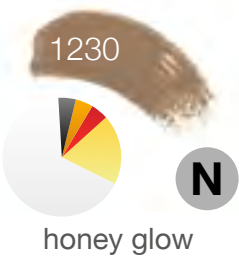
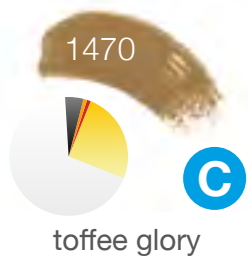
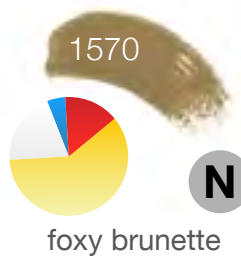
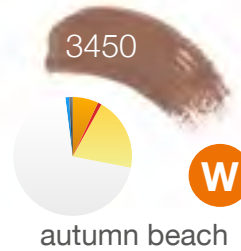
- Waste should be segregated at the point of origin.
- Bags/bins should only be filled to 3/4 full.
- Waste bags should be used in foot operated pedal bins.
- Waste bags should be sealed securely and marked with 'point of origin' label prior to disposal.
- Waste should be collected on a regular basis by a licensed waste management contractor.
- Personal protective clothing should be worn when handling waste.
- Waste should be correctly bagged in appropriate colour-coded bags which must be UN-approved and comply with BS EN ISO 7765:2004 and BS EN ISO 6383:2004.
- Waste should be double bagged where the exterior of the bag is contaminated or the original bag is split, damaged or leaking.
- Waste should be kept in a rigid-sided, fire retardant holder or container with a foot operated lid, and, so far as is reasonably practicable, out of the reach of children and unauthorised personnel.
- Waste should be stored in a labelled, lockable/secure, vermin-proof storage space for collection, on a well-drained, impervious hard standing floor, which is provided with wash-down facilities.
- Bags should be securely sealed and labelled with coded tags at the point of use to identify their source.
- Waste should not be decanted into other bags, regardless of volume; be contaminated on the outside or re-used.
- 'Sharps' must be disposed of into approved sharps containers that meet BS 7320/UN 3291.
- 'Sharps' containers should NEVER be placed into any waste bag.

TYPE	EYES	HAIR	SKIN	UNDER TONE	PIGMENT CHOICE	CODE
 <p>TRANSPARENT</p>	LIGHT GREY LIGHT BLUE	ASH BROWN DARK BROWN BLACK	Cool porcelain skin with visible Blue, Purple or Red blood vessels and Violet influences around the eyes. Avoid very dark pigments	To counteract cool violet undertones, on the colour wheel the complementary colour to Violet is Yellow	As your main colour, choose pigments with a neutral Yellow or warm Orange base.	<div>1940</div> <div>3450</div> <div>1960</div> <div>3750</div> <div>2550</div>
 <p>TRANSLUCENT</p>	LIGHT BLUE BLUE GREEN HAZEL	DARK BROWN BLACK	Ivory porcelain or Celtic skin, Northern European with blue influence around the eyes. Lips have a pinky-lavender shade. Avoid very dark pigments.	Blue undertones would need to be neutralised by the complementary hue on the colour wheel, Orange.	As your main colour, choose a pigment with a warm Orange base. If lighter Ash Brown, add Yellow.	<div>1940</div> <div>2550</div> <div>1960</div> <div>3450</div> <div>1980</div> <div>3750</div>
 <p>ROSE</p>	GREY BLUE BLUE GREEN HAZEL	BLONDE ASH BLONDE COPPER	Rose-Beige, soft Pink or Red-Violet skin. Lips often Purple or Lavender. Visible capillaries, red neck, blushes easily.	If you see Violet Pink undertones refer to your colour wheel to select Violet. Can be warmed up with Orange if necessary.	Main Colour choice should be a Gold, Golden Yellow or Orange base	<div>1230</div> <div>1630</div> <div>1350</div> <div>2550</div> <div>1430</div> <div>3450</div>
 <p>OLIVE</p>	BROWN DARK BROWN BLACK	DARK BROWN BRUNETTE BLACK	Yellow-Brown, Golden Brown or Olive skin. Mediterranean looks.	With Green undertones, across from Green on the colour wheel is Orange.	A Golden-Yellow or Orange based pigment would be the best choice.	<div>1940</div> <div>3450</div> <div>2550</div> <div>3750</div>
 <p>SALLOW</p>	BROWN DARK BROWN	MID BROWN DARK BROWN BRUNETTE BLACK BLONDE	Yellowish complexion, pale yellow ivory skin with slight traces of green. East Asian skin types.	Yellow Neutral undertones will often have shades of Green. Across from Green on the colour wheel is Orange.	Warm pigments with an Orange base should be used.	<div>1960</div> <div>3450</div> <div>1980</div> <div>3750</div> <div>2550</div>
 <p>BROWN</p>	BROWN DARK BROWN	DARK BROWN BRUNETTE BLACK	Mid to dark Brown skin tones. North African, Hispanic, Multi-Ethnic and Indian.	Dark cool undertones should be neutralised with warm pigments.	Use a warm Yellow/Orange base and then adjust according to the result on the second application	<div>2550</div> <div>3450</div> <div>1980</div> <div>3750</div>
 <p>BLACK or WHITE</p>	BROWN DARK BROWN BLACK	RED BLACK ASH BROWN	Both extremely dark and extremely pale skin types. African, Celtic or Scandinavian.	Colours will tend to heal cooler so select a warmer and lighter pigment.	Use a warm Yellow/Orange base and then adjust according to the result on the second application	<div>1940</div> <div>2550</div> <div>1960</div> <div>3750</div> <div>1980</div>

DERMAGRAPH® PIGMENT RANGE

Here are the core colours of the Dermagraph® pigment range. Specially formulated for microblading applications. With a small micron size and high concentration they are the ultimate in purity and colour stability.

Please note that; due to the printing process, actual colours may vary from those displayed here.



and finally..

**PRACTICE
PRACTICE
PRACTICE**

...it's the only way to
excellence.

V CROBLADING



MACRAPH



