

# FAT DISSOLVING INJECTIONS

## MANUAL

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## **\Health & Safety at Work Act**

The purpose of this act is to promote, stimulate and encourage high standards of health and safety at work. It protects not only all people at work – whether employers, employees, or self-employed – but also the health and safety of the general public who may be affected by your work activities.

### **Main Duties of employers**

Employers must safeguard so far as reasonably practicable the health, safety and welfare of the people who work for them. This also applies in particular to the provision and maintenance of safe systems of work, and covers all machinery, equipment and products used.

All reasonable precautions must be taken in the use and handling of any substance likely to cause a risk to health. All storage and transport arrangements should be kept under review.

Employers need to provide any necessary information, instruction and training in safe practices. Consider specific training needs with particular reference to processes and activities with special instructions.

Provide a safe place of work including safe means of access to and from it. Welfare facilities and arrangements must be adequate.

### **Duties to others**

An employer must carry out his work in such a way that it does not affect the health and safety of others i.e. other employees, members of the public.

### **Duties of employees**

All employees must take reasonable care for the health and safety of themselves and of other persons who may be affected by what they do, or fail to do, at work. This duty implies positive steps to understand the hazards in the workplace, to comply with safety rules and procedures, and to ensure that nothing they do or fail to do puts themselves or others at risk.

## **Workplace (Health, Safety and Welfare) Regulations 1992**

The Workplace (Health, Safety and Welfare) Regulations 1992 cover a wide range of basic health, safety and welfare issues and apply to most workplaces.

Under these regulations, an employer must comply with the following -

- **Maintenance** - the workplace and equipment must be maintained in good condition. Where appropriate, there must be a planned system of regular maintenance
- **Ventilation** - enclosed workplaces must be provided with fresh or purified air
- **Temperature** - a reasonable temperature must be maintained inside the building during working hours. Thermometers must be provided for staff to consult.
- **Lighting** - suitable and sufficient lighting must be provided. Natural light should be used where possible. Emergency lighting must also be provided where necessary
- **Cleanliness** - the workplace and equipment must be kept clean. Waste should not be allowed to accumulate (except in suitable receptacles)
- **Space** - room dimensions should provide sufficient floor area, height and unoccupied space for the health safety and welfare of the staff
- **Workstations** - workstations must be suitable for the workers who use them and the work which is done
- **Seating** - where work can be done sitting, suitable seating must be provided for each person doing that work
- **Floors** - floors should be suitable and not uneven, holed or slippery. They should be kept free from obstruction or contamination likely to cause slipping. Staircases should normally have a hand-rail
- **Falls** - precautions should be taken to prevent people from falling or being struck by falling objects.
- **Windows** - transparent or translucent doors or walls must be made of a safety material or protected against breakage and must be clearly marked. Opening windows must be safe to use. All windows and skylights must be designed to allow safe cleaning
- **Traffic routes** - design must allow safe circulation of pedestrians and vehicles and traffic routes should be clearly indicated
- **Doors and gates** - doors and gates must be suitably constructed. Devices should be fitted to keep sliding doors on their tracks, to prevent upward opening doors from falling back, and to ensure safe operation of powered doors. Doors which can be pushed from either side should have panes to provide a clear view of the space around the door

- **Escalators** - escalators and moving walkways shall be safe in use, and fitted with necessary safety devices, including emergency stop controls
- **Sanitary conveniences** - suitable and sufficient toilets shall be provided at readily accessible places. They must be well ventilated and lit and kept clean. A schedule to the Regulations specifies how many are needed, depending on the number of workers
- **Washing facilities** - washing facilities, including showers if needed, with hot and cold water, soap and hygienic means of drying must be provided
- **Drinking water** - a supply of drinking water must be provided for all workers at readily accessible places
- **Clothing** - accommodation must be provided for storage of a person's own clothing not worn at work, work clothing kept at the workplace, and for changing facilities
- **Rest and meals** - suitable rest facilities must be provided at conveniently accessible places. Arrangements must be made to protect non-smokers from discomfort from tobacco smoke in rest rooms and rest areas. Pregnant women and nursing mothers must be given suitable facilities. Facilities for eating meals must be provided where meals are normally taken at work

## **Management of Health and Safety at Work Regulations 1999**

The Management of Health and Safety at Work Regulations 1999 place an obligation on the employer to actively carry out a risk assessment of the work place and act accordingly. The assessment must be reviewed when necessary and recorded where there are 5 or more employees. It is intended to identify health and safety risks.

The regulations require an assessment of ALL working activities.

The regulations require that certain measures need to be followed:

- avoid risk where possible
- assess risks that cannot be avoided
- combat risks at source
- adapt the working environment of the individual
- use technology to reduce risk
- implement risk prevention measures to form a coherent policy and approach
- give priority to measure that protect the whole workforce rather than one person
- ensure employees understand the control measures
- encourage a positive health and safety culture

## **Control of Substances Hazardous to Health Regulations 2002 (COSHH)**

COSHH stands for the Control of Substances Hazardous to Health and includes many chemicals, fumes, dusts and biological agents. Under the Control of Substances Hazardous to Health Regulations there is a requirement for employers to control the exposure to these substances in order to prevent ill health in employees and others who may be exposed.

The effects of exposure to these substances can range from minor skin irritations to eye injuries, lung diseases, cancers and even death. A failure to control exposure can lead to employers facing enforcement action, loss of business and civil claims.

### **COSHH Assessments**

The Control of Substances Hazardous to Health Regulations specify what substances must be controlled. Suppliers of these substances must provide a safety data sheet for the substance which specifies the hazards and suggested precautionary measures. These should be referred to when carrying out an assessment under these regulations.

There are several steps that must be taken when carrying out an assessment under these regulations.

#### **Step 1 - Assess the risks:**

Identify the hazardous substances and the risks that they present. Consider how the chemical is used and by whom. This will allow you to determine how people could be exposed to harm (e.g. inhalation, ingestion, and skin contact)

#### **Step 2 - Decide what precautions are needed:**

Precautions should be considered in the following order and the highest possible on the list adopted.

1. Substituting the substance with a less harmful one
2. Change the process (e.g. eliminate the release of fume)
3. Use a safer form of the substance (e.g. pellets not powder)
4. Enclose the process
5. Provide specific or general ventilation
6. Provide Personal Protective Equipment (PPE) as a last resort (e.g. gloves, masks, goggles)

#### **Step 3 - Prevent or control exposure:**

It may be necessary to measure the concentration of substances in the air from time to time to ensure that employees are not exposed to unacceptable levels of hazardous substances.

#### **Step 4 - Ensure that controls are used and maintained:**

Measuring the concentration of substances in the air may also show whether the control measures are working properly.

#### **Step 5 - Monitor employee exposure:**

It may be necessary to monitor individual employee's exposure to certain substances.

#### **Step 6 - Carry out Health Surveillance:**

This is required where employees are working with certain substances and full details are provided in the Control of Substances Hazardous to Health Regulations.

#### **Step 7 - Inform and train employees:**

You must ensure that employees understand the risks associated with the substances used, use the control measures and report any concerns or faults.

### **Code of practice for Hygiene in Beauty Salons**

Hygiene is not so much a set of rules as an attitude of mind and common sense. The stricter the rules, the less risk there is of error causing complications.

In the Beauty Industry we are working in a close body contact situation where the risk of cross infection exists between the client and the therapist, as well as between the clients. Clients have a right to expect that in all such personal treatments there will be a high standard of hygiene and cleanliness of surfaces and instruments, and the washing of hands prior to treatment should become second nature.

Remember that there are many infections that afflict client's, which may not just be of AIDS proportions, but are nonetheless avoidable.

#### **Hands**

The therapist should always ensure that waterproof plasters cover any obvious cuts or abrasions on their hands. In addition, any obvious cuts or abrasions on the client in areas to be treated must be similarly covered or additional care taken in cleaning and disinfecting. The therapist should wash their hands before and after treatment and wear disposable gloves.

#### **Footwear s**

Clients should wear foot coverings at all times. We recommend that floors be cleaned daily with a cleaner that destroys protein. The therapist should wear

closed shoes as to protect the feet from any accidents such as needle prick injuries if you were to drop the roller.

## **Hygiene**

Surgical spirit is useful for cleansing skin, instruments and surfaces to remove grease and organic matter. A concentration of 70% alcohol should be considered minimal for most other purposes. Items such as blankets, towels and headbands have been commonly used and cleansed by washing, several councils will not allow the use of material items within the room. Areas that will come into contact with blood should be barrier wrapped where appropriate. Again, this is not always a recommendation of your local council, however we believe that the best practice is the only way to remove risk of infection or cross contamination.

Your beauty couch should be wrapped in barrier film. Your trolley should also be covered, or you can use disposable surgery packs or dentist bibs to put down the items you will be using. Dentist bibs are absorbent on one side and waterproof on the other. These can then be disposed of straight after the treatment in a biohazard waste bag.

## **The Appearance of the Therapist**

A beauty therapist should be an example to her trade.

A client will look to her therapist as a professional and this will be reflected not only in how she looks, but also her attitude and deportment.

A therapist is a reflection on the company in which she works. If a client does not feel satisfied with the hygiene of either the therapist or the salon, she is not likely to return.

### **Overall or uniform:**

- Should be worn at all times during working hours.
- Should be clean and smell fresh. Ideally a clean uniform should be worn each day.
- Should not be decorated with anything other than a name badge or that of a professional organization to which the therapist is a member.
- A disposable apron should be worn for each client to help reduce cross contamination and keep your uniform clean.

### **Hair:**

- Should be clean and secured off the face.

**Nails:**

- Should be of a workable length.
- If nail extensions are worn, these should be cleaned underneath every time you wash your hands and they should be of a decent length and shape so as not to pierce your gloves.

**Footwear:**

- No high heels to be worn for health and safety and comfort reasons.
- You should have closed in back and no peep toes.
- Should be clean. It is good practice to keep a pair of shoes in work and travel to and from work in outdoor shoes.

**Personal Hygiene:**

- Deodorant should be worn at all times.
- No heavy perfumes should be worn.
- Smokers must take extra care with their personal hygiene. The smell of cigarette smoke clings to fingers, clothes and hair. Clients may find this offensive.
- Be aware of fresh smelling breath. If having close contact with a client, avoid garlic and excessively spicy food the previous night. Face masks also help mask smells and allow you to work at close contact with your client.

**Sterilisation and Disinfecting**

**Sterilisation:** This is the complete destruction or removal of living organisms on an object. Micro-organisms (bacteria, viruses and fungi) may be destroyed by heat, chemical disinfectants and ultraviolet radiation. All tools must, however, be cleaned to remove grease before disinfection is to take place.

**Autoclave:** This is similar to a pressure cooker, with the water contained inside it is reaching temperatures of 121 – 134 C. This is the most effective method for the sterilisation of tools within the salon.

Not all objects can safely be placed in an autoclave; check your tools can withstand the heating process. To avoid damage to the autoclave, distilled water must be used. Metal tools placed in the autoclave must be of a good quality to avoid rusting. Take care when removing tools from the autoclave –as they will be very hot.

**Glass bead steriliser:** Small glass beads are retained in a beaker and heated to a temperature of 190C. Tools are placed in these beads for 10 minutes. A disadvantage of glass bead sterilizer is that it cannot hold large items.



**UV Steriliser:** UV light will only be effective on surfaces that are exposed to the UV light. Tools will therefore need turning during the process to ensure that all surfaces are thoroughly sterilised. UV sterilisation is not suitable for brushes.

**Disinfection:** This is the destruction of micro-organisms, but not usually bacterial spores, reducing the number of microorganisms to a level, which will not be harmful to health. (Inhibits the growth of micro-organisms)

In most salons, 'Barbicide' is a recognised name as a germicide and disinfectant liquid in which tools can be stored.

Surgical spirit can also be used.

**Antiseptic:** Is a substance that inhibits the growth of bacteria but not kill the bacteria.

**Bacteria:** A single cell organism without a nucleus, which produces a compound called a toxin.

**Fungus:** This is a low form of vegetable life, which includes mushrooms and moulds. Some varieties cause disease, such as ringworm. A fungi stat will inhibit growth of any fungus while a fungicide will kill fungus outright.

**Virus:** A small part of a group of infectious agents. They have the ability to copy themselves outside of a living host cell. Viruses can be classed as pathogenic – causing disease as opposed to non-pathogenic (not causing disease)

**Infestations:** This is the presence of animal parasites, e.g. Mites, ticks or worms, either in the body, clothing or house.

## **Ergonomics**

Posture is important, whether you are sitting or standing up to do a treatment. Try to find a working position that is comfortable for you and reduces the need to lean over to just one side.

Using height adjustable treatment couches and chairs. Choose a height that reduces your need for bending over the client. Ideally your back should be at a 90-degree angle. Your chair should be comfortable to avoid pressure point sores or injury.

Try to avoid twisting the neck, keep your head upright and keep your shoulders relaxed.

Never ignore pain, look at ways to alleviate the symptoms. If you cannot take a break during a treatment, then you can adopt gentle stretching techniques.

Repetitive strain injuries can be caused by using the same movements over and over again. Try to avoid repetitive flexing of the wrist and instead alternate by bending elbows or shoulders instead. Equipment should feel comfortable in your hand.

### **The Personal Protective Equipment at Work Regulations 1992**

This act covers your requirements under the COSHH regulations. You are required to wear or provide to your employees protective clothing or equipment (PPE) to ensure their health and safety when handling chemicals or coming into contact with bodily fluids.

#### **What PPE will you need?**

- Powder free non latex Gloves that must be changed for each new client.
- Disposable aprons.
- Face Masks
- Eye wear (optional)

● Some therapists like to wear eye protection although the risk is very low from spillages or splashes. However, a new apron, facemask and gloves should be worn before each new client.

### **The Provisions and Use of Work Equipment Regulations 1998**

Under these regulations all electrical equipment used in your workplace must be suitable for the purpose for which it is used. Equipment must be properly maintained, and all staff should be trained in the use of the equipment. These regulations apply to both new and second-hand equipment.

### **The Environmental Protection Act 1990**

Under this act, anyone that disposes of waste has a duty of care to ensure that waste is disposed of safely.

Subjects covered by the Environmental Protection Act 1990 are as follows:

- Waste management
- Noise pollution

- Neighbourhood pollution
- Radioactive substances
- Genetically Modified organisms
- Nature Conservation

Under the Environmental Protection Act 1990 it is unlawful to deposit, recover or dispose of controlled (including clinical) waste without a waste management licence, contrary to the conditions of a licence or the terms of an exemption, or in a way which causes pollution of the environment or harm to human health. Contravention of waste controls is a criminal offence. Section 34 of the act, places people concerned with controlled (including clinical) waste under a duty of care to ensure that the waste is managed properly, recovered or disposed of safely and is only transferred to someone who is authorised to keep it. Householders are exempt for their own household waste.

Hazardous healthcare waste is subject to the requirements of the Hazardous Waste Regulations 2005. **[Extract taken from Gov.UK website <https://www.gov.uk/healthcare-waste> 30th June 2014]**

All commercial businesses must have a waste removal contract with either the council, or a private waste removal company. If you produce less than one bin bag full of clinical waste per collection, then you can dispose of clinical waste such as cotton wool and tissues in with a normal waste collection. If you produce more than this per collection, then a suitable clinical waste contract must be obtained.

### **Safe Disposal of Sharps**

EU Directive 2010/32/EU on the prevention of sharps injuries in the health care sector. Does it mean anything to you?

As set out in the Health and Safety Executive the aims of the Directive are as follows:

- To achieve the safest possible working environment
- To prevent workers' injuries caused by all medical sharps
- To protect workers at risk
- To set up an integrated approach establishing policies in risk assessment, risk prevention, training, information, awareness raising and monitoring
- To put in place response and follow up procedures.

### **So how does the EU Directive affect me?**

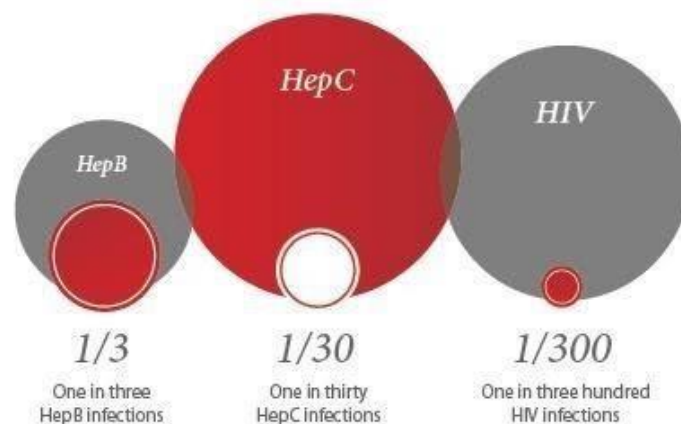
The EU Directive is aimed at employers, requiring them to make appropriate provisions for staff in respect of the risk of sharps injuries. It is the employer's duty to ensure the health and safety of workers. The directive reinforces the need

for appropriate levels of training and equipment. A risk assessment must be carried out and where there is a risk of exposure, employers need to identify how exposure can be eliminated. Where exposure cannot be eliminated exposure should be prevented through:

- Providing sharps disposal equipment as close as possible to where sharps are being used
- Banning the practice of re-sheathing
- Implementing safe procedures for using and disposing of sharp medical instruments and contaminated waste
- Eliminating the unnecessary use of sharps

Employers should be aware of their legal duties under existing legislation and the new directive, which emphasise carrying out risk assessments on the prevention of sharps injuries. There should be a strategic level commitment to reducing sharps injuries.

Health and safety law is criminal law, and companies can be subject to enforcement action if they fail to comply with the legal requirements relating to the prevention of sharps injuries.



According to [www.needlestickforum.net](http://www.needlestickforum.net) 100,000 needle-stick injuries occur each year in the UK<sup>1</sup>.

### What do I need to know?

- Only one roller/stamp to be used per client.
- Rollers should be disposed of immediately after use.
- Be careful when working on your clients so as not to catch yourself with the needle.
- Your sharps box must be close to hand and ideally wall mounted.
- Sharps boxes must be disposed of as soon as they are three quarters the way full and closed with the safety seal.
- Have a needle prick procedure policy to hand in case of injury to remind you of what to do.

## **Waste Electrical and Electronic Equipment Regulations 2006**

Under this act anyone that disposes of waste has a duty of care to ensure that all waste is disposed of responsibly.

Any chemicals that you may use in a salon will be considered waste. However, most of these may be diluted with water and often disposed of down the sink. However, you should ask the manufacturer of the best and correct way of disposal. You can also seek advice and guidance from your local council.

The Waste Electrical and Electronic Equipment Regulations places a duty on Manufacturers, importers and retailers with regards to safe disposal of products. There is also a duty on salons to ensure that you only purchase from respectable suppliers and dispose of any unwanted equipment at registered sites which are able to take electrical waste.

## **The Regulatory Reform (Fire Safety) Order 2005**

The Government is committed to regulating only where necessary and in a way that is more suited to the needs of a modern business. That is why the order was made, under the Regulatory Reform Act 2001. It replaces most fire safety legislation with one simple order. It means that any person who has some level of control in premises must take reasonable steps to reduce the risk from fire and make sure people can safely escape if there is a fire. [Extract from A short guide to making your premises safe from fire]

Your responsibility as an employer:

- Carry out a fire risk assessment for the premises
- Develop evacuation procedures
- Provide and maintain clear means of escape, signs and notices
- Provide emergency lighting
- Provide fire detection and alarm systems
- Provide adequate means of fighting fires
- Train Staff
- Consult with all staff on the fire procedures.

## **Types of Fire Extinguishers**

**There are five classes of fire:**

Class A: Fires which involve solids such as paper, wood and hair. Class B: Fires which involve liquids such as solvents.

Class C: Fires which involve gases such as propane and butane.

Class D: Fires which involves metals.

Class F: Fires which involve hot oil such as cooking oil.

### **Water**

There are Red with a label on that indicates that it can only be used for class A fires. This must not be used on electrical fires and can cause quite a lot of damage.

### **Foam**

Red extinguisher with a cream label on the front and used for class B fires or small class A fires. These extinguishers cannot be used on electrical fires and can also cause quite a bit of damage.

### **Carbon Dioxide**

These are Red with a Black label and can be used on all fires especially class B and electrical.

### **Dry Powder**

Red extinguishers with a blue label and can be used on all classes of fires but especially suitable for class B, C and electrical fires. The big disadvantage to this type of extinguisher is the mess left over from the residual powder that has to be cleaned up and the powder can also damage other electrical equipment.

### **Wet Chemical Extinguisher**

Red extinguisher with a yellow patch and it used for extinguishing cooking fats and oils.

## **The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995**

These regulations are commonly referred to as RIDDOR and their main purpose is to alert the enforcing authorities to incidents and causes of ill health that may need further investigation. Their second role is to collate statistics and to assist in the implementation of initiatives to reduce accidents in the work place.

If any of your employees or trainees suffers a personal injury at work that results in either;

- Major Injury

- Death

Then you must contact the Incident Contact Centre on 0845 3009923.

Less serious injuries have to be reported using form F2508 available on the HSE website. Less serious injuries include:

- More than 24 hours in hospital
- Incapacity for more than 7 days.

Other incidences that are reportable include:

- A member of the public or client is injured and admitted to hospital.
- Any member of staff that is injured due to an act of violence that is work related.

All records of injuries minor or major must be recorded in your accident book.

Further guidance can be found on the HSE website [www.hse.gov.uk/riddor](http://www.hse.gov.uk/riddor).

## Health & Safety (First Aid) Regulations 1981

Your environmental health officer may ask if you have a completed First Aid training. The HSE recommends that businesses with fewer than 50 staff members should have at least one qualified and appointed First Aider. First Aid courses can last anything from half a day to 3 days. The half day courses are not usually accredited so it is highly recommended to at least complete a full days of First Aid training.

These regulations also require that every employer provides equipment or facilities for providing First Aid to their employees. Even if you do not have employees, having a First Aid Kit to hand when required is good practice.

A First Aid box and an eye wash station with single use pods should be enough with extra items kept aside for restocking.

Your First Aid box should contain the following:

Number of Employees	1-5	6-10	11-50
Contents	QTY	QTY	QTY
First Aid Guidance Notes	1	1	1
Individually wrapped sterile adhesive dressings	20	20	40

Sterile Eye Pads, with attachment	1	2	4
Sterile triangular bandages	1	2	4
Safety Pins	6	6	12
Medium sized sterile unmedicated dressings	3	6	8
Large sterile unmedicated dressings	1	2	4
Extra Large sterile unmedicated dressings	1	2	4

First Aid boxes must not include any form of medication. Such as Paracetamol or Ibuprofen

### **Electricity at Work Regulations 1989**

The most common causes of accidents in the salon environment include:

- Electrical Fires
- Electrical Shock
- Electrical Burns

There are simple precautions that you can follow to reduce these risks to you and your employees or clients.

The Law requires that electrical equipment should be maintained to prevent danger. Regular checks should be undertaken on all electrical equipment. This should include:

- Checking that there are no frays or tears in the leads.
- Checking that plugs have no damage or bent pins.
- Looking for damage to the outer cover of the equipment.
- Looking for any signs of overheating, such as burn marks or stained plugs.
- Check that cables are not trapped under trolleys, seats or furniture.

Annually (or on the 1<sup>st</sup> anniversary of any new equipment) you should get a Portable Appliance Test (PAT) done on all your electrical equipment. This isn't mandatory but may form part of your licencing and insurance requirements. PAT testing costs as little as 30p per item and a sticker will be placed on the item to state whether it has passed or failed the test.

### **The Local Authority Licencing Application**

The registration and bye law requirements vary from council to council. We offer you the best guidance to ensure a smooth application for any area that you may live. However, it is important that you call the Environmental Health department and ask them what their requirements are prior to application.



## **Why should I register?**

It is a legal requirement for anyone offering invasive treatments (that break the skin) to register for a Licence with their Local Authority. More councils are now cracking down on therapists that have not registered, and the fines can be quite high.

Having a licence and displaying it for your clients to see will only add to your professionalism. Councils are there to work with you, not against you. Don't be afraid of speaking to them, they will give you all the advice you need and allow you to put things in place.

## **How should I prepare for a council visit?**

You should be as prepared as possible for a visit from the council. The following is just a basic list of what they will expect to see:

### **The Room**

The Environmental Health Officer (EHO) will first want to inspect your room. They will look at what type of flooring you have. Wipe clean flooring is preferred and they will ask how you clean it and how often. Your room should be free from curtains, drapes, towels and cushions and anything else such as absorbent woods and material.

You should have a sink in the room that has hot and cold running water. A soap and towel dispenser is also handy to have next to the sink and a 'How to Wash your Hands' guide. Sinks should be operated by an elbow lever tap or foot pedal.

Your trolley, mag lamp and beauty couch should be barrier wrapped. You will be asked how often this is changed (between clients or wiped down with special cleaners). They will expect to see a sharps box close to hand and usually hanging from the wall.

Your stool should also be wrapped and no trailing wires anywhere in the room. Mag Lamp cables can be clipped to the wall or taped out of the way or use cable grips to attached loose trailing wires to trolleys. You can purchase Velcro fasteners from eBay.

The room should be self-contained and have no contamination from spray tans, hair or nails. You should have adequate ventilation and lighting and changes in floor height clearly marked.

No smoking signs should also be clearly displayed.

## **Keeping Records**

The EHO will ask you to provide a copy of your consultation form and whether or not you keep photographs of the clients. They may also ask how you store this information and for how long.

They will also ask to see copies of Medical Safety Data Sheets (MSDS or SDS) for any products or anaesthetics you may use during the treatment.

They will also want to see how you dispose of your waste and copies of the contract with your waste removal contract.

## **Cleaning**

The EHO will ask what products you use to clean your work surfaces and floors with and how you use the product. Make sure you are familiar with how long a product has to be left on for and what PPE you may need when using such products.

They will also ask how you dispose of derma rollers and other items you use during the treatment. As most are now disposable it is easy enough to just throw these items away and you will not need to have a cleaning procedure for these.

## **Preventing Cross Contamination**

Your EHO will want to know how you prevent cross contamination. A few basic points should cover any questions that she/he may have:

- You protect your trolley with fresh barrier film or dental bibs before every new client.
- You use a new roller for each client and open this up in front of them before starting the procedure.
- Use a new roller for each new client and each new appointment.
- You get out everything you need so you have it to hand, such as wet wipes, cotton wool, dispense the right amount of anaesthetic into a small pot.
- Wipe down all products after each treatment.
- Use a new pair of powder free latex free gloves on each new client. Make sure you wash hands before and after putting on or removing gloves.
- You may be required to produce proof of your Hepatitis B Vaccinations.

## **What else may I be asked?**

- The EHO will ask to see what anaesthetics you use and how you use them.
- They will require to see a copy of your aftercare form.
- You may also be asked if and how you perform a patch test for anaesthetic.
- You may be asked what you use post treatment and how this is applied.

- Have you displayed your training certificates?
- They will ask for copies of your liability insurance.
- Proof of your first aid training and if you have spill kits for cleaning up sick or blood.
- Do you have an upto date tetanus?

## **Effective Cleaning**

When working within the beauty industry it is important to ensure high standards of hygiene. This becomes increasingly more important when you are performing invasive procedures.

Having a good cleaning routine not only protects yourself, but also prevents cross contamination between clients.

It is best practice to clean your room between clients, with a thorough clean being done at least once a week, if not more dependent on the amount of how many clients you treat each week.

Cleaning physically removes contamination which includes microorganisms but will not kill all microorganisms even if the surface look clean.

You can clean all work surfaces using a detergent and warm water. Read the instructions carefully on any products you use to make sure they won't damage your work surfaces.

## **Ultrasonication**

Is a liquid-based method of cleaning that is recommended for some types of metal equipment. The process is performed in a lidded tank and can clean in between apertures and recesses. The tank of the Ultrasonic cleaner should be cleaned twice a day and kept clean and dry overnight.

## **Disinfection**

This reduces the number of living microorganisms, but may not necessarily kill all fungi, viruses, bacteria and spores. Disinfection is not the same as sterilisation. Items or surfaces must be cleaned before disinfection can occur.

## **Sterilisation**

Sterilisation kills all microorganisms and also bacterial and fungal spores that may survive the disinfection process. Steam sterilisation is the preferred method of sterilising any equipment you may use as it fast, easy to use and non-toxic.

UV sterilisers and glass bead sterilisers are not considered to be adequate methods of sterilisation.

### Types of cleaning agents

Agent	Instruments	Skin	Work Surfaces
Powder or liquid based detergents that are diluted in hot water as per the manufacturer's instructions.	This can be used for initial cleaning of instruments before disinfection or steam sterilisation	No	Effective enough to use on all work surfaces between clients or at the end of the day before disinfection
Bleach or Hypochlorite. On application bleach products must contain minimum 1000ppm available chlorine. For example from sodium dichloroisocyanurate (NaDCC) soluble tablets.	No	No	Yes on hard manmade work surfaces.
60-80% alcohol is available as spray or as wipes.	No	Yes	Yes however the surface must be cleaned beforehand.
Halogenated Tertiary Amines and quaternary ammonium compounds (e.g. Trigene); these products are available as spray or wipes.	Yes but may cause damage to metal surfaces with prolonged use	No	Yes
Chlorhexidine based products often combined with alcohol such as Hibisol.	No	Yes	No
Glutaraldehyde based products	This substance should never be used on the skin and is an irritant and Allergan. Exposure is strictly controlled under COSHH. Its use is not recommended unless appropriate measures are in place.		

## **Blood Borne Pathogens**

### **What are blood borne pathogens?**

Blood borne pathogens are infectious microorganisms in human blood that can cause disease in humans. These pathogens include, but are not limited to, hepatitis B (HBV), hepatitis C (HCV) and human immunodeficiency virus (HIV). Needle sticks and other sharps-related injuries may expose workers to blood borne pathogens. Workers in many occupations, including first aid team members, housekeeping personnel in some industries, nurses and other healthcare personnel may be at risk of exposure to blood borne pathogens.

### **What can be done to control exposure to blood borne pathogens?**

In order to reduce or eliminate the hazards of occupational exposure to blood borne pathogens, an employer must implement an exposure control plan for the worksite with details on employee protection measures. The plan must also describe how an employer will use a combination of good work practice and ensure the use of personal protective clothing and equipment, provide training, medical surveillance, hepatitis B vaccinations, and signs and labels, among other provisions. Engineering controls are the primary means of eliminating or minimizing employee exposure and include the use of safer medical devices, such as the derma pen.

### **AIDS – Acquired Immune Deficiency Disease:**

AIDS is caused by a human immune-deficiency virus (HIV). The virus attacks the body's natural immune system and makes it vulnerable to infections, which will eventually cause death. Some people are known to be HIV positive, which means that they are carrying the virus without any symptoms of AIDS. HIV carriers are able to pass on the virus to someone else through infected blood or tissue fluid, for example through cuts or broken skin. The virus does not live for long outside the body

### **Hepatitis B:**

This is a disease of the liver caused by a Virus (HBV) that is transmitted by infected blood and tissue fluids.

The virus is very resistant and can survive outside the body. People can be very ill for a long time with Hepatitis B infection. It is a very weakening disease, which can be fatal.

Strict hygiene practices are essential to prevent Hepatitis B from spreading in the salon.

### **Dealing with body fluids:**

If blood or body fluids have to be mopped, ensure that disposable gloves, apron and disposable paper are used. All disposable items should then be placed in a yellow plastic sack and destroyed by incineration.

Neat chlorine bleach should be used as the sterilizing agent on blood spills. The bleach treatment will destroy the viruses, which will cause AIDS and Hepatitis B.

### **Gloves**

We prefer to use Nitrile gloves when performing derma roller treatments. They fit snugly on the hand like latex gloves but without the allergy risk.

You should always wash your hands prior to putting on your gloves following the NHS guidelines.

How to properly remove gloves:

1. Using your right hand grasp the rim of the left glove and remove it turning it inside out.
2. Whilst holding onto the glove turned inside out, use your left hand, grasp the rim of your right glove and pull it off of your hand without touching anything.
3. Dispose of the gloves in your bio-hazard waste bag.
4. Wash your hands following the recommended guidelines.

## **Blood borne and Body Fluid Exposure Policy and Procedures BLOODBORNE PATHOGENS POLICY AND PROCEDURE HBV IMMUNIZATION AND PREVENTION TRAINING**

Before engaging in a treatment where exposure to human blood and/or Other Potentially Infectious Materials is probable or possible, each student, trainer or therapist must present either evidence of HBV immunisation against hepatitis B virus disease (HBV) and undergo training to prevent or minimise exposure. Each person should check with their local GP or Health Clinic about such costs and must produce evidence of such costs for reimbursement. Students, Trainers or Therapists who want to forego such immunisation must sign a formal disclaimer statement.

### **DEFINITIONS**

Bloodborne Pathogens- pathogenic microorganisms present in the human blood and other body fluids which can cause disease in humans.

Potentially Infectious Material- include:

1. human body fluids including; semen, vaginal secretions, pleural fluid, amniotic fluid, saliva.
2. anybody fluid/excretion that is contaminated with blood.

Universal Precautions - Strict adherence to standard precautions is required in all treatment situations.

All staff and students are required to use appropriate personal protective equipment whenever contact with blood or other infectious material is expected. Personal protective equipment includes but is not limited to, gloves, masks, aprons, face shields, and eye protection.

**WASH HANDS** before and after all contact with clients.

Consider all blood, visibly bloody secretions and fluids and genital secretions from **ALL CLIENTS** to be infectious

**GLOVES** are required for all anticipated contact with human blood, body fluids, or mucous membranes.

**CHANGE GLOVES** and wash your hands after each procedure and before contact with another Client.

**WEAR MASK OR GOGGLES** when blood or body fluids may splash into your face. **WEAR WATERPROOF APRONS** when blood or body fluids may soak through a cloth gown.

**YOU ARE RESPONSIBLE** for properly disposing of any sharps or infectious materials you have used in designated containers.

Definition of blood and body fluids (for blood borne pathogens):

- Human blood and blood products
- Semen and vaginal secretions
- Cerebrospinal fluid (CSF), synovial fluid, peritoneal fluid, pericardial fluid, amniotic fluid
- Saliva in dental procedures (assume blood contamination)
- Anybody fluid visibly contaminated with blood (especially from spots)

Notice that other body excretions such as saliva, urine, stool, vomitus, and respiratory secretions are not included on this list (unless visibly contaminated with blood). However, many of these excretion present other infectious hazards.

## **Bloodborne and Body Fluid**

Exposure Policy and Procedures

### **Needle Prick or Cross contamination Procedure**

- 1) Immediately wash wounds and skin sites that have been in contact with blood or body fluids with soap and water or flush mucous membranes with water . (No evidence exists that using antiseptics for wound care or expressing fluid by squeezing the wound further reduces the risk of Bloodborne pathogen transmission; however, the use of antiseptics is not

contra-indicated). Or After any exposure, the first thing to do under every circumstance is to tend to the exposure to minimize your contact to blood or body fluid. Wash the area

with soap

and water for five minutes, or if a mucosal exposure, rinse with water or saline for five minutes.

Any other first aid should be begun as needed, e.g. direct pressure to the wound. DO NOT irrigate the wound.

- 2) Immediately inform your Manager or another member of the team.
- 3) Attend your nearest hospital Accident and Emergency Department.

## **Anaphylaxis**

Some allergies can lead to a severe allergic reaction - known as anaphylaxis. Anaphylaxis can be life-threatening.

Symptoms can occur quickly or within hours following contact with an allergen. Prompt treatment can save a life. If you have an adrenaline auto-injector - use it immediately.

### **Common causes**

Common causes of anaphylaxis are wasp and bee stings as well as food, such as peanuts, nuts, sesame seed, fish and shellfish, dairy products and egg. Other causes include latex, penicillin and some other medications.

For some, fatigue or exercise may cause anaphylaxis - alone or in combination with other triggers like food or medication. Cold can also be a cause. In rare cases a reaction can occur without apparent cause.

### **Symptoms**

- Itching, especially under the feet, in the hands or on the head
- A stinging feeling in the mouth
- Swelling in the mouth, throat, lips or eyes
- Itching, redness or nettle-rash anywhere on the body
- Dizziness, anxiety, cold sweating
- Abdominal pain, nausea or vomiting
- Shortness of breath or asthma symptoms
- Sudden fatigue, decreased blood pressure or fainting
- Disorientation or loss of consciousness

**Critical symptoms:** difficulty to breath, mouth and throat swell, sudden fatigue or dizziness, experiencing a steady worsening of symptoms.

If your client experiences these critical symptoms, Call 999 and say "anaphylaxis".



## **Treatment**

Adrenaline is the first line treatment for anaphylaxis. If you have an adrenaline autoinjector - use it immediately.

Antihistamine and steroid tablets. Antihistamine reduces hives, itching and irritation. Cortisone reduces the risk of late onset reactions that can occur some hours following contact with allergens.

## **Who is at risk of anaphylaxis?**

A person who has previously experienced anaphylaxis - irrespective of cause - is at risk in the future.

If the reaction was caused by peanuts, shellfish or fish, it should not be ignored, even if mild. This is especially important if the reaction was caused by peanuts. This is also the case for certain drugs, insect stings or latex. Your doctor will give you essential information and prescribe suitable medication.

When your client suffers from anaphylaxis

- Do not underestimate the severity of an allergic reaction. Use your adrenaline auto-injector according to its instructions. If in doubt, use your adrenaline auto-injector - it can save their life. Then lay them down with their legs slightly elevated.
- Call 999 and say "anaphylaxis." State your name, location and telephone number.
- If possible, someone should wait outside to show the ambulance crew where you are.
- Let ambulance personnel know about the clients medical history and treatment undertaken.

## **Subcutaneous Fat**

Fat is a ubiquitous component of the skin and subcutaneous tissues. Fat was once believed to be the storage system of excess energy (in the amount of calories consumed over the expenditure of energy). However it is now believed that fat is a complex structure that we are only beginning to understand.

Dysregulation of adipose tissue through obesity or lipoatrophy has proven that fat has complex metabolic, hormonal, endocrine and immune functions. Fat loss procedures are the number one most popular treatment in cosmetic and non-cosmetic clinics around the world.

## **Anatomy of Fat**

- Subcutaneous adipose tissue was once thought to be nothing more than a storage device with a pre-determined number of cells and of limited purpose. Now it is recognised as a complicated organ in its own right with essential endocrine and metabolic functions.
- An increase or decrease in adipose tissue mass as seen in those with anorexia or obesity have significant effects on multiple systems of the body such as the immune or reproductive system.
- There are two types of adipocyte cells. These are brown and white cells that not only vary in colour but also in function and each have different vascular and nerve supplies.

It has been well accepted that subcutaneous fat is an important component of the skin however the physiology of fat is still poorly understood by dermatologists. The demand for fat removal, redistribution or manipulation of fat cells is as popular as ever.

There are many conditions that affect the distribution of fat cells within the body. Studies have shown that there is a link between obesity and high death rates due to cardiovascular disease and diabetes. Men and women carry fat differently. Men carry fat in the upper mid-section of the body called android or male-type obesity also referred to as visceral obesity. Women store fat on the lower parts of the body known also as the gluteofemoral region and is known as gynoid or female obesity. The excess of this also can be associated with higher grades of cellulite.

The structure of fatty tissue is divided into two layers separated by a superficial fascia. The external layer (areolar layer) comprises of vertically orientated globular large adipocytes. The deeper of the layers – known as the lamellar layer has horizontally arranged cells that are smaller in size but with much larger and more numerous blood vessels. The areolar layer is much thicker in women and children and thus is thicker in the gynoid areas. During puberty the development of fatty tissue is more robust in women than in men. This is due to an increase in estrogen that stimulates the replication of adipocytes. These adipocytes are much more stable metabolically and also resistant to lipolysis.

There are only a few hormones that are capable of affecting lipolysis in adipocytes and these are known as catecholamine's (epinephrine and norepinephrine which are lipolytic) and insulin (which is antilipolytic).

## **White & Brown Adipocytes**

Adipocytes are organized as a 'multidepot organ' and only make up a third of adipose tissue. The remaining two thirds of adipocyte tissue comprises of nerves, fibroblasts and adipocyte precursor cells or pre-adipocytes.

Once matured adipocytes are categorised as either white adipose tissue (WAT) or brown adipose tissue (BAT) both distinguished by their colour and function. WAT cells are yellow or ivory in colour whereas BAT cells are brown and contain multilocular brown adipocytes. BAT cells have a richer vascular tree and denser

capillaries in conjunction with mitochondria, which makes for its brown colour. BAT and WAT cells are distinct yet interchangeable. Lipids in WAT cells are organized within the one large 'Unilocular' droplet. White adipocytes are spherical and allow for maximum expansion of volume within a limited space. The nucleus is usually compressed to one side due to a high lipid content. Lipids within the brown adipocytes are organized into smaller multilocular droplets. They have a higher mitochondrial content that is packed with cristae within the cytoplasm. The cells are polygonal and have a centrally placed nuclei and are relatively smaller in comparison to the WAT cells.

WAT Cells are distributed in several anatomically distinct and separate areas or 'depots', such as the subcutaneous and intra-abdominal area. Each has its own characteristic, metabolic, endocrine, paracrine and autocrine function. In adults BAT Cells are found around major blood vessels, in perinephric fat pads and near adrenal glands.

Brown adipocytes can also appear white if it's not stimulated. White adipocytes can also change such as during a fast. They will become elongated and multilocular or 'slim'.

## **Cellulite**

Cellulite is a condition of human adipose tissue. It is characterized by padded and nodular appearances on the skin in areas prone to cellulite such as the thighs and buttocks. Cellulite is found primarily in women and is caused by a change in skin topography caused by herniation of subcutaneous fat within the connective tissues.

Cellulite is different from obesity and is seen in women with any body mass index (BMI). Cellulite is a result of various factors such as:

1. Gender – cellulite predominantly affects women.
2. Ethnicity – Asian women are less likely to suffer from cellulite than European women.

3. Diet –a high carbohydrate diet causes hyperinsulinemia and promotes lipogenesis that can lead to an increase in total body fat and enhance the appearance of cellulite.
4. Sedentary lifestyle – prolonged periods of sitting or standing inhibits blood flow leading to a lack of microcirculation in the areas prone to cellulite.
5. Pregnancy – hormones and increased water retention lead to promote cellulite lipogenesis.

Cellulite is characterized by the presence of fatty protrusions through the dermo hypodermal junction. Cellulite can be separated into three main grades based on its severity.

### **GRADE 1**

Grade 1 cellulite is characterized by smooth skin with no visible signs of dimpling when lying down or standing up. The skin however, when pinched, shows a mattress type configuration.

### **GRADE 2**

Grade 2 cellulite is a dimpled appearance present upon standing but will disappear when the client is lying down.

### **GRADE 3**

Grade 3 cellulite can be seen in clients who show visible signs of dimpling when both standing up and lying down.

Cellulite can often be treated as ‘cellulite’ to reduce or shrink swelling in the area or fat cell. Skin laxity and underlying extra cellular matrix also plays a role in the appearance of cellulite and should be taken into consideration when devising a treatment plan.

When treating cellulite, a detailed client consultation should take place to determine:

- History of bleeding disorders
- Vascular or lymphatic insufficiency
- Prior treatments for cellulite such as skin tightening, lipolysis or liposuction
- Medication and medical history should be taken and noted on the consultation form

A physical exam should be undertaken with the client-standing upright wearing comfortable clothing. A note should be made of any scars, cellulite grading and texture of skin. Photographs should be taken with the client in the same position – in the same light and the same underwear to try to ensure photographic consistency.

## **How fat cells divide**

A person of normal weight will have just three layers of fat cells. We need a certain amount of fat cells to protect our vital organs and insulate our body.

When a person gains weight these fat cells will swell and when they can expand no more, they divide through a process known as mitosis or cell division meaning the individual then gains six layers of fat cells. As the person continues to overeat the cycle of swell > multiply > swell > multiply continues.

When you diet the fat, cells reduce in size, but the number of layers remain the same.

After a treatment destroys the cells, the cells cannot come back or be used for fat storage again. However, they can still multiply if the client continues on a cycle of destructive eating.

## **How a fat cell dies**

There are two ways that cells within the body can die; these ways are necrosis and apoptosis.

Necrosis happens when the cells or the living tissues are damaged by an external influence causing an unprogrammed cell death. Necrosis is caused by injury, toxins, infection and cancer or if the tissue has been cut off from the blood supply e.g. from a heart attack or stroke.

When the cells die from necrosis, the cells undergo a trauma that initiates a chain reaction within the body causing a release in enzymes. The harmful chemicals found in these enzymes can lead to further complications (such as inflammation) and damage to surrounding cells.

Apoptosis is a more clinical and natural method for the cell and is dubbed as 'cell suicide'. This is a much gentler cell death than necrosis as the cells die through a programmed cell death, which is more controlled and predictable.

When a cell is compelled to commit suicide, which is what we trigger it to do with certain fat loss treatments, proteins called caspases go into action. These caspases spur on the production of enzymes known as DNases, which break down the cellular components, needed for survival, which in the case of the fat cell is through the destruction of the DNA in the nucleus of the cell. Once the cells have been broken down and shrunk it sends a distress signal, which is answered by the macrophages (the bodies waste disposal system). The Macrophages remove these shrunk cells by sending them to the lymphatic system for them to be

removed by the body, so there is no damage caused to any of the fat cells surrounding tissue.

Another way that apoptosis differs from necrosis is that apoptosis is essential to the human body's development. An example of this is when a baby is developing in the womb, they have webbed fingers and toes, over time the cells forming this webbing dies off to leave behind 10 fingers and 10 toes. That is a natural cell death, which is caused by apoptosis. Programmed cell death is also responsible for the process of menstruation when an unfertilized egg and the cells of the womb lining die naturally and get removed from the body as they are no longer needed.

Apoptosis is not always perfect and sometimes the wrong cells kill themselves or cells that should have died stick around.

Cells that die from apoptosis die in response to signals within the body as opposed to cells that die from trauma (necrosis). If the body recognizes a virus or genetic mutation the cells may induce a programmed cell death to prevent the damage from spreading, the cells may also go into apoptosis when they are under stress such as that caused by radiation or free radicals.

Signals within the body can also send messages that a cell should continue living. All cells have varying levels of sensitivity to the positive and negative triggers, so sometimes errors may occur, and the wrong cells may live or die. Scientists are learning how to modulate apoptosis, so they can control cell death. Should their efforts be successful we may then become one step closer to finding better treatments for degenerative diseases such as Alzheimer's, Parkinson's disease or Cancer.

## **What are Fat Dissolve Injections?**

Subcutaneous injections that reduce adipose tissue are often referred to as:

- Fat dissolve injections
- Mesotherapy
- Aqualyx (Registered Trademark)
- Injection Lipolysis
- Lipodissolve
- Phosphatidylcholine (PC/PPC)
- Deoxycholate (DC)

Fat dissolve treatments are intended for the use on small pockets of fat and not to be used as a solution for large surface area body contouring.

The term lipolysis describes the hydrolysis, or degradation, of lipids into their constituent fatty acid and glycerol building blocks. Fat dissolve lipolysis results in the reduction of fat cell volume while still maintaining cell viability.

The term lipolysis describes the hydrolysis or degradation of lipids into their constituent fatty acid and glycerol building blocks. Lipolysis will result in the reduction of the fat cells volume. Fat dissolving injections were originally introduced by a dermatologist called Dr. Rittes, in Sao Paulo, Brazil. Dr. Rittes reported a reduction of infraorbital fat using direct subcutaneous injections with a product called Lipostabil®. Over the years, studies undertaken by Dr. Rittes have shown reduction in fatty tissue on hips, abdomen, flanks/love handles, bra-strap fat, buffalo humps and jowls in both men and women.

## **Deoxycholic Acid**

Deoxycholic acid is a secondary bile acid produced by intestinal bacteria after the release of primary bile acids in the liver. An accidental discovery revealed that Deoxycholic acid produced cell death and cell lysis. Deoxycholate is an ionic detergent that disrupts the integrity of the biological membrane by introducing their polar hydroxyl groups into the cell membrane's phospholipid bilayer hydrophobic core. The process involves first an attack of the product on the membrane, saturation of the membrane with the product and finally the membrane breakdown and solubilisation.

Now to explain and throw out the myth that Deoxycholic acid causes ulceration and necrosis of tissue other than fat. In all reported clinical studies, case studies and FDA registration trials, ulceration was non-existent. Researchers have recently demonstrated that Deoxycholic acids ability to lyse cells is inversely related to the amount of protein surrounding the and within the tissue with which the product comes into contact, sparing the tissue from necrosis. This effect is mediated due to the presence of albumin (an abundant protein) which has a very high affinity to Deoxycholic Acid. Albumins high concentration in vital tissues but low concentration in fat can explain why fat dissolving injections with Deoxycholic acid are relatively safe. In over 350 studies skin necrosis and damage to other bystander tissue by this product was not reported. Necrosis and ulceration are instead linked to older, self-prepared concoctions, large injection volumes, unknown products being injected and poor injection techniques at the wrong depths.

Fat dissolve treatments are not without their side effects. These may include:

- Injection site erythema
- Tenderness ● Numbness
- Oedema/Swelling
- Bruising
- Burning or stinging sensation

These effects will be temporary and will disappear in a matter of minutes to days.

## **Phosphatidylcholine**

The original fat dissolve product was phosphatidylcholine derived from soybean that was injected using mesotherapy techniques and became largely popular in

the 1990's in Brazil. The product was used to reduce triglycerides and cholesterol levels in patients with coronary heart disease.

Phosphatidylcholine, a component of lipoproteins is a purified extract from lecithin. This phospholipid is a major component of all cell membranes and is also the primary phospholipid in plasma. The phosphatidylcholine molecule is composed of choline, phosphoric acid and fatty acids and occurs naturally in the body, especially within nerve tissue, the liver and semen. Phosphatidylcholine is obtained through consuming soybeans, egg yolks, meat and some vegetables. The injection of Phosphatidylcholine is thought to augment Phosphatidylcholine in lipoproteins, thereby enhancing their ability to mobilise fat and cholesterol and triglycerides and are believed to induce lipolysis.

In the first paper on fat dissolving, Dr. Rittes reported on a technique she had been using since 1995. In her 2001 study she published a paper on the treatment of lower eyelid bulging caused by prominent fat pads. Dr. Rittes concluded that Phosphatidylcholine injections (250mg/5ml) into periorbital fat pads, postponed the need for lower eyelid blepharoplasty. She further went on to release papers on studies undertaken on fat deposits on patients abdomen, neck, arms and thighs, using Phosphatidylcholine (250mg/5ml, in an 80-cm<sup>2</sup> area, using a 30g ½ inch insulin needle). Dr. Rittes observed clear improvement in all patients, with a significant decline in fat deposits and no recurrence or weight gain over a 2-year follow up.

A further study by Dr. Hexsel, reported on their own clinical experience using the same Phosphatidylcholine (250mg/5ml) injections to treat subcutaneous fat deposits on patients whose injections were performed a minimum interval of 1 – 2 weeks apart. They discovered that Phosphatidylcholine was effective in diminishing the treated fatty areas with minimal side effects. They concluded treatment with this product was safe, effective and inexpensive.

In 2007, a study on none healthy female volunteers with grade II-III thigh cellulite was undertaken to determine the safety and efficacy of a Phosphatidylcholine based cosmeceutical anti-cellulite gel combined with Light Emitting Diode (LED) treatment at 660nm (red) and 950 nm (near-infrared). Volunteers were randomly treated twice a day for 3 months with the active gel on one thigh and a placebo gel on the control thigh. Each thigh underwent a 15-minute treatment with LED, a total of 24 treatments overall.

At the end of the 3-month trial, it was found that cellulite had downgraded in grade through clinical examinations, digital photography and pinch test assessments, in 8 of the 9 thighs treated with the Phosphatidylcholine gel and LED. A statistically significant decrease in immediate hypodermal depth and echolike intrusions into the dermal layer in the treated thighs was determined using digital ultrasound at the dermal-adiposal interface. In the thighs where the placebo gel was used there were few clinical alterations noted.

What areas of the body can be treated with Fat Dissolve?



- Jawline, Jowls and Chin
- Bingo wings/Arms
- Bra Fat
- Love handles/Flanks
- Stomach
- Thighs
- Knees

## **TYPES OF INJECTION TECHNIQUES**

Generally, according to the depth, working from the epidermis to the hypodermis, a distinction is made between one of these 3 techniques:

**PAPULE:** 1 to 2mm, with bevel upwards

**NAPPAGE:** 2 to 4mm, angle of 30° to 60°

**POINT BY POINT:** deep injections, 4 to 12mm

### **Papule**

This is a superficial intradermal technique, which consists of injecting the product at the junction between epidermis and dermis.

The tip of the needle is inserted into the most superficial layer of the skin and a depth of between 1 and 2 mm, with the bevel facing upwards. A pale, clearly delineated papule appears at the time of injection. Its absence is a sign of poor technique. The papule fades within the space of a few minutes and disappears entirely within the next

30 minutes. This technique is particularly suitable for wrinkles and immunostimulation.

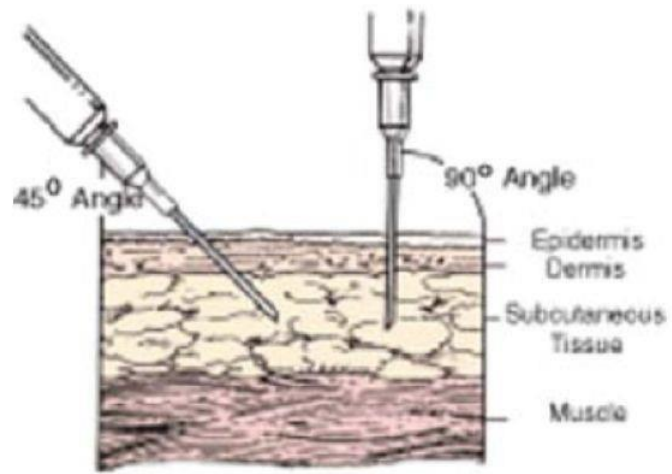
### **Nappage**

This was Dalloz  
is the  
used

Nappage is a superficial intradermal technique which consists of performing a series of injections 2 to 4 mm apart while continuously maintaining a regular and constant pressure on the plunger. The

inserted at an angle of 30° to 60° and to a depth of between 2 and 4mm.

The product/medication is deposited on the surface is left in contact with the epidermis for 3 to 5 minutes to assist its penetration. There is a variation on this technique with an epidermal nappage which consists of applying the product to the epidermis, at a depth of less than 1 mm. This has the advantage of causing minimal bleeding, if any, bleeding.



### **Point by point**

This is a deep intradermal or hypodermic injection technique, consisting of separate injections at depths from 4 to 12 or even 15 mm depending on the area and the indication for treatment.

P.B.P is generally indicated in rheumatology, in sports pathologies and in aesthetic medicine for the treatment of cellulite. In the latter case, it is particularly suited to targeting deep nodules or for fibro-sclerous cellulite.

### **The Mesotherapy Technique**

To achieve outstanding results in Mesotherapy you will need:

1. Professional Training
2. Proficient Protocols
3. Precise Techniques
4. Effective Equipment & Supplies
5. Superior Quality Ingredients

Mesotherapy can involve anywhere between 8 to 300 injections, depending on the condition, protocol and the size of the area that is being treated. When more than 40 shots are given, it is typically because the person is getting multi-injections for skin rejuvenation procedures, alopecia procedures or cellulite treatments.

The number of Mesotherapy treatments required depends upon many variables - the condition, the abnormal physiology causing the condition, as well as the severity of the problem.

## **Performing Mesotherapy**

- Preparation of the cutaneous surface prior to injection
- Penetration of a small quantity of the active agent
- Introduction of the needle to the skin from a depth of 2 – 6 mm
- Manual or Device assisted application using the papule, nappage or point by point techniques.
- Apply serums with the patient lying down
- Map the area to be treated in each session
- Position the patient to present the best angle for application. Application must always be perpendicular to the skin
- Introduction of the needle to the skin from a depth of 1mm – 12mm based on procedure
- Injection of 0.1 – 0.8 ml. of the serum applied symmetrically with a separation distance of 0.50 - 5 cm

## **Requirements for Mesotherapy**

**ALL MATERIALS THAT TOUCH THE PATIENT'S SKIN SHOULD BE STERILE AND DISPOSABLE.**

### **1. INGREDIENTS:**

All approved, skin-compatible, serums with proven effectiveness can be used.

In Mesotherapy all ingredients must be water soluble, isotonic, non-allergenic and do not cause nodules, abscess or necrosis at the injection site.

### **2. SYRINGES:**

Syringes are used ranging from the classic 1cc. insulin syringe, to the 5, 10 or 20cc syringes. Most commonly used syringes in Mesotherapy are: 5cc to 20cc luer lock syringes & 5cc to 20cc slip tip syringes.

### **3. NEEDLES:**

The so-called "Lobel needle" is the needle most commonly used in Mesotherapy.

Recommended needles for applications: Face and Neck - 4mm 30G  
Mesotherapy

Needles Cellulite & Fat - 6mm 30G Mesotherapy Needles and 1/2-inch 30G  
Needles

### **SIDE EFFECTS OF MESOTHERAPY**

There are few side-effects in Mesotherapy. In most cases, they are minor and reversible:

#### **1. Potential General Effects**

- Tenderness
- Burning or Itching
- Pain
- Swelling
- Bruising

#### **2. Potential Side Effects**

- Flushing
- Vagal Response (drop in heart rate/blood pressure)
- Allergy
- Dizziness
- Nausea

#### **3. Potential Local Effects**

- Hematoma
- Necrosis
- Abscess
- Hyper-pigmentation
- Infections
- Mycobacterium

**Side effects usually occur because of:**

1. Product used.
2. Method of injection/incorrect method.
3. Perforation of blood vessels.

## **How to minimise side effects**

### **ALLERGIES:**

No clear cases of allergies have ever been recorded in the course of treatment by Mesotherapy. The possible reactions described are mainly rashes which disappear in 2 to 3 days. Any allergic reaction noted in a patient should however result in the immediate stoppage of the treatment. Always record the product used and batch number of any product used.

### **PAIN:**

This depends on uncontrollable factors such as individual sensitivity, the sensitivity of the area to be treated and the depth of the injection. To assist in the reduction of pain the following factors must be taken into account:

1. Technique: The injection must be fast and precise
2. Equipment: The needles must be of good quality and the needles must be regularly changed during the sessions covering large areas.
3. Depth: Pain should be minimal at 0.01-0.5mm depth. This is the optimum depth for mesotherapy on the face.

### **INFECTIONS:**

Infections are always possible once the skin barrier has been broken. They can easily be avoided by observing a few simple rules:

1. Use of top-quality products offering all the necessary guarantees of sterility
2. Use of sterile, disposable equipment
3. Careful disinfection of the areas to be treated
4. Advise patients on hygiene specific to the treatment they have received

### **HEMATOMA:**

Hematoma is the most frequent side effect despite all the precautions taken. It can however easily be masked by suitable make-up and disappears within 2 or 3 days after treatment. Particular care in avoiding vessels and capillaries during the procedure will assist in reducing the instance of hematoma.

## **Client Satisfaction**

The most successful salons earn their reputation by providing excellent personal service. A service can only be truly personal when the needs of each individual client are understood, and treatments and advice are matched to their needs.

### **Giving a Consultation:**

Information is obtained at the consultation by asking questions and by examining the area to be treated. Keep eye contact with your client, listen carefully and note the answers given to you. This way, clients know you are genuinely interested in what they are telling you. Remember, clients may disclose information to you of a personal or sensitive nature. It is a breach of the Industry Code of Ethics to discuss or disclose this information with third parties unless it directly affects the treatment being given.

If a course of treatments is recommended, you must make sure the client understands why they are necessary, what costs are involved and any particular conditions or lifestyle changes that may have to be made for achieving success with the treatments, for example, frequency of treatments, or specific home care.

### **Completion of a Consultation Form:**

Any information gathered during the consultation (specific to the treatment) will be recorded on a Consultation form. It is important not to make the client feel that she is being interrogated but to be genuinely interested in what she is telling you. The consultation form must be filled in neatly and accurately, making note of the date, treatment given and therapist's name. This information may be needed in the future by another therapist treating that client.

### **Examining the client:**

Clients are more satisfied when they feel they have been examined thoroughly. Information provided by the examination will help to provide an accurate treatment plan. Please ensure that any contra indications you may come across are noted, and, where necessary are referred to a GP for further diagnosis, without causing undue stress or worry to your client. Do not give an opinion of what condition you think it may or may not be. We are not Doctor's and are not qualified to name specific conditions.

### **Planning the treatment:**

The most important outcome of the consultation is the treatment plan.

When you have assessed the client's needs and requirements, gathered as much information as is necessary and determined the most appropriate treatment/s for

the client, the treatment plan must then be discussed with the client, making the client aware of cost, time etc.

The consultation process is ongoing throughout the course of treatment. You will be assessing results achieved and the treatment plan may need to be altered at some point, depending on the effects of the treatment. It is essential to keep consultation forms up to date as to what point you have reached in the treatment plan.

Please ensure: -

- Equipment, tools and products relevant to the treatment are prepared prior to the client's arrival. (Where able)
- Client is made comfortable and their clothing is protected.
- Therapist's hands are washed prior to and following a treatment.

### **Consultation:**

- Are there any contra indications?
- Establish the client's usual routine.
- What are the requirements for the treatment?
- Are the client's expectations realistic?
- Establish skin analysis where necessary.
- Fill in a consultation form, making note of relevant information.
- Explain the benefits of the treatment to the client.
- Discuss costs and any changes the client may need to make to their usual routine.

### **Consultation procedure:**

It is important to collate the following information in order to build up a complete picture concerning the client's requirements, way of life and economic background.

**You will need to establish:**

**Client's name, address and contact number.**

A situation may arise when you need to contact a client to rearrange an appointment, check on the effects of a previous treatment or market a new product/treatment that may be beneficial to them.

**Record the clients GPs name, address and telephone number.**

This is essential in case the client is taken ill whilst at the salon, or if you require the GP's permission for a treatment to commence.

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**Client's Date of Birth.**

It is psychologically better to ask for the date of birth rather than their age. Knowing the client's age will give you a clearer idea of why the skin is in a particular condition and what treatment will be required.

**Lifestyle.**

It is important to establish what kind of lifestyle the client has. Does she have a stressful job? How many children does she have? How old are her children? Is she a smoker? All these details will help you to plan your treatments accordingly.

**Present Health.**

Briefly record any recent illnesses or medication that the client may be taking. This is very important as a recent illness can dramatically affect the outcome of the treatment. Furthermore, certain forms of medication may be a contra-indication for skin needling.

**Usual routines.**

Record in detail the client's home care routine and the skin care range that she is presently using. This will give the therapist an indication as to how the client treats her skin, and the price range of products presently being used. This will be of particular use if there are retail products available within the salon. Your client may have to be careful what products she uses around the area she has had treated post treatment.

**Known Allergies.**

These must also be recorded. Does she have any occupational, medical, food or cosmetic allergies? This may have some bearing on her lifestyle and environmental background.

**Treatment Form – Fat Dissolve**

Title (Mr, Mrs, Miss, Ms.): .....

First Name: .....

Surname.....

Address:.....

.....



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.....  
Post Code: ..... Date of Birth.....

Tel: ..... Mobile: .....

E-Mail:

.....  
.....  I am voluntarily consenting to the Fat Dissolve Treatment.

I understand that the procedure can result in an appearance enhancement and is typically used for small, stubborn, pockets of fat. The treatment involves the use of needles to inject a fat dissolving substance into the subcutaneous layers.

I also understand that I may require a series of treatments normally with at least two-four weeks between procedures, to achieve the maximum cosmetic result.

I acknowledge that no written or implied verbal guarantee, warranty or assurance has been made to me regarding the outcome of the procedure.

I understand that the treatment can cause mild to moderate stinging sensation in the treated area that can last up to four hours.

I need to avoid hot baths and showers, saunas, steam rooms and public pools for 48 hours post treatment.

There is a small risk of infection of the treated skin area after the procedure, although this is not expected to occur due to the sterility of the medical devices used.

Other side effects include, bruising, swelling, hematomas and slight reddening of the area that may be present for up to 7 days.

I understand that the treatment has rare complications that can include, nodular cysts, necrosis of muscle or skin tissue, hyper-pigmentation, infection or abscesses. Should any of these occur I should seek medical assistance immediately and inform the clinic as soon as possible of any outcomes.

I understand that individual results may vary, and no guarantees are made in regard to the expected outcomes of this procedure. I am happy to proceed with this treatment on this basis.

I confirm that the treatment and product being used has been explained to me in full and that I am happy to proceed with the treatment on that basis. I have asked all questions that I may have and received all appropriate aftercare.

\_\_\_\_\_ I understand that I am undertaking this treatment knowing the full facts, side effects, treatment outcomes and complications and I will not hold the clinic responsible should any issues mentioned above occur.

\_\_\_\_\_ I give full consent to the use of my before and after images for marketing purposes, providing all identifying features are covered and that there is no way to identify myself from the image. Images will be kept for 6 years and may be used in the event of a claim being brought against us. They will be stored on a password encrypted hard drive.

\_\_\_\_\_ Under GDPR rule I understand that I have full access to all data held on me. This data will be held by the clinic for no longer than 6 years for insurance purposes, after which, digital information will be deleted permanently, and paper documents will be destroyed. All information on myself is kept on password encrypted hard drives or locked in filing cabinets to which only selective staff members have access. None of my personal data will be sold or used for anything other than to provide the services of this clinic.

Please ensure you understand the potential complications and personal requirements of the Fat Dissolve procedure indicated below and please acknowledge or answer the points and questions:

	YES	NO
Are you allergic to local anaesthetics, do you have a history of anaphylactic shock (severe allergic reactions)?		
Do you consent to the use of a local anaesthetic?		
Do you suffer from any known allergies? If yes, please specify on the next page of the is form.		
Have you taken oral retinoids (Roaccutane) in the last 12 months?		
Are you using topical retinoids/Vitamin A products?		
Do you have active acne with papules or pustules?		
Are you taking Aspirin, Warfarin, other anti-coagulant treatments or any other medication or dietary supplements such as Omega-3 that can affect platelet function and bleeding time?		
Do you have or have you had any form of skin cancer?		
Are you taking/receiving steroids, chemotherapy or radiotherapy?		
Are you taking any other medication? If Yes, please specify on the next page of this form.		
Do you suffer from any illness e.g. diabetes, angina, epilepsy, hepatitis, auto immune disease?		

Do you suffer from keloid or hypertrophic scars?		
Do you have a history of herpes simples (cold sores) or other skin infections?		
Have you undergone a laser resurfacing or skin peel in the last 6 weeks?		
Are you pregnant or is there any possibility that you are pregnant?		
Are you breastfeeding?		
Will you refrain from intensive sunlight exposure and/or artificial UV exposure for a period of at least 2 weeks?		
Will you use topical sun protection products with an SPF 30+ or higher and with stated UVA/UVB protection on a daily basis with regular applications for the same period?		

Additional comments:

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I confirm that to the best of my knowledge that the information that I have supplied is correct and that there is no other medical information I need to disclose.

I understand that treatments and products is not an exact science and therefore that no guarantee can be given as to the results of the treatment referred to in this document. I accept and understand that the goal of this treatment is improvement, not perfection, and that there is no guarantee that the anticipated results will be achieved.

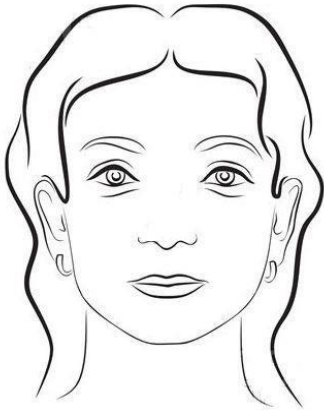
Patient/Client Signature: ..... Date:

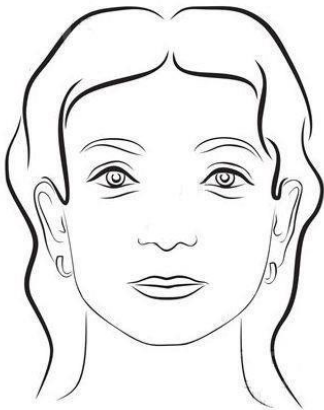
.....

Practitioner Signature: ..... Date:

.....

Date	I have read the consent	Signature

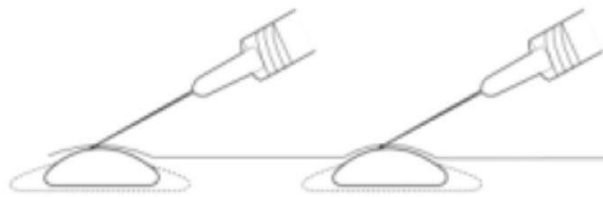
Treatment No.	Date	Needle Batch No.	Administered By
			

Treatment No.	Date	Needle Batch No.	Administered By
			

**Contra-Indications**

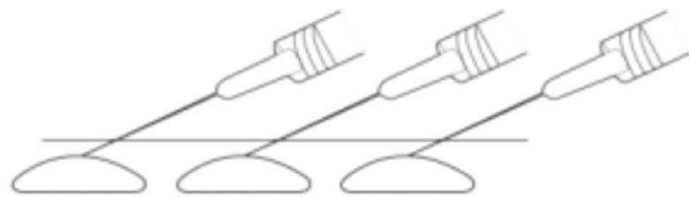
**Cautions and Contraindications**

- Any open skin wounds including broken skin, scabs, wounds, bleeding skin and blisters should be avoided.
- Rashes, psoriasis, eczema, pustular or nodular rosacea and fungal infections should all be avoided.
- Contagious skin conditions should be avoided.
- Raised moles, warts or moles that have changed shape or colour and unidentified skin growths should be avoided.
- Bruised skin can be painful to treat and should be avoided.
- Skin cancer must be avoided.
- Keloid scars are a strict contraindication.
- Anti-



technique developed by Bourguignon and most commonly technique.

needle is



- coagulant medications as these prevent the blood from clotting.
- Any medications that cause photosensitivity as this can lead to Post Inflammatory Pigmentation (PIP)
- Areas where topical medication is being applied as the product can be forced trans-dermally and may cause unwanted side effects.
- Cosmetic treatments such as micro-dermabrasion, IPL, chemical peels or cosmetic surgery until all signs of inflammation has gone.
- Pregnancy is a contraindication. It is advisable to leave fat dissolve treatments until 6 months from the birth or 6 months post breast feeding to allow the clients hormones to regulate.
- Haemophiliacs are a strict contraindication.
- Diabetes.
- Recent use of Ibuprofen, Nurofen or similar.
- Liver or kidney disease.

## Aftercare

1. There may be itching, stinging, redness, or warmth in the treatment area post treatment. This will last between a few hours to a couple of days.
2. Swelling and bruising are normal and can reside for several days post treatment.
3. The skin may feel tender to touch.
4. It is important to drink plenty of water to help the body remove the excess waste. We recommend 1-2 litres per day.
5. Avoid sun exposure or sunbeds for a week post treatment to reduce the chance of hyper-pigmentation.
6. A healthy diet and light exercise should be maintained throughout the course of treatment.
7. In rare cases nodules, necrosis, abscesses, hematomas, or infection may occur. If you experience anything that concerns you, please seek medical attention immediately.

### **Fat Dissolving Procedure**

1. Undertake a full consultation with your client and explain the procedure, how it works, expected outcomes, course of treatments required and anticipated costs and aftercare.
2. The client may be nervous about injections. Whilst anaesthetics can be used, it increases the risk to the client, increases side effects and also increases your own liability. The client can obtain anaesthetic from their local pharmacy and apply it to their treatment area 20 minutes before their arrival. The area should be cleaned properly of all anaesthetic residue prior to starting the procedure. Other alternatives for pain control can include, the use of ice packs, vibrating instruments that limit the transmission of pain to the nerve endings or the client can take paracetamol an hour before the treatment. It is advisable to ask the client to speak with a pharmacist about the suitability of taking any tablets prior to treatment. The use of ibuprofen should not be advised as this can increase bleeding and bruising in the area.
3. Photographs and/or measurements should be taken of the treatment area. Ensure either a light or dark plain background is used, that lighting is adequate and the position of the client and you are the same for all pictures. This ensures a decent before and after comparison.
4. Clean the skin with a clinical wipe or alcohol wipe to prepare the area for injection.
5. Ensure you are wearing the correct PPE and everything you need is to hand.
6. Draw grids on the client for the treatment area. This is usually 1 cm square grids on the chin/jowls and 1.5cm on larger body parts.

7. Draw your chosen product into the appropriate number of syringes. Attach the correct sized needles to the syringe. Ensure no air bubbles are present.
8. In a series of injections, use either a linear technique or point by point technique to inject the product under the skin, into subcutaneous fat. 1 Unit is usually injected into the chin and jowl area into each grid, whereas 1-3 units are injected into each grid on the body. This will vary between product used and area treated.
9. Wipe over the area and look for any contra-actions.
10. Give your client full aftercare before they leave.

**Warning**

To avoid needle stick injury, never recap the needle.