
Unit Specification

UBT455 – Enhance appearance using mesotherapy techniques

Unit reference number: F/650/7976

Level: 6

Guided Learning (GL) hours: 14

Overview

The aim of this unit is to develop the learners' knowledge, understanding and practical skills when using various mesotherapy techniques. To introduce beneficial activating solutions such as: hyaluronic acid, vitamins, minerals, amino acids, peptides, and treatment cocktails, into the epidermal layers of the skin to enhance appearance of the face, body and scalp.

The unit covers the skills involved in providing a thorough consultation to establish client suitability for treatment, alongside the knowledge of how to formulate a specific treatment plan tailored to suit individual client needs and requirements. Learners will also develop the knowledge required to provide pre and post-treatment advice and post care, including maintenance treatments needed to ensure the client receives the full benefit of the treatment and to both maximise and maintain results.

Learning outcomes

On completion of this unit, learners will:

- LO1 Critically analyse the safety considerations when providing mesotherapy techniques
- LO2 Critically analyse accepted protocols and guidelines for providing mesotherapy techniques
- LO3 Critically analyse the uses, limitations, benefits and effects of mesotherapy equipment, products and techniques
- LO4 Formulate consultation, planning and preparation protocols for mesotherapy techniques
- LO5 Demonstrate proficiency in application of mesotherapy techniques

Version 1

Unit content

LO1 Critically analyse the safety considerations when providing mesotherapy techniques

Suppliers' and manufacturers' instructions for safe use

Taught content

- Understand the features and benefits, also know reasons for supplier and manufacturer product and equipment protocols for mesotherapy techniques including skin sensitivity and patch test recommendations where appropriate and why this can vary
- Follow supplier/manufacturer and organisational protocols for mesotherapy product and equipment safety; only used for the intended purpose, correct storage, moving, handling, loading, preparation and sanitising, maintenance advice/requirements, record keeping, risk assessments, checks/visual checks, cleaning, use and methods of use, skin sensitivity and patch test recommendations
- Understand the products appropriate for use during mesotherapy treatment preparation, performance of techniques, post care and aftercare application according to supplier/manufacturer instructions, for example, cleansing, topical anaesthetic/numbing agents (if appropriate), skin antiseptic, treatment products, active solution, hyaluronic acid, vitamins, minerals, amino acids, peptides, single component applications and treatment cocktails, serums, complication management, sun protection factor (SPF)
- Follow supplier/manufacturer guidelines to select appropriate treatment products as per client specific requirements to use single component applications or treatment cocktails in line with supplier's/manufacturer's instructions and guidelines when appropriate
- Follow supplier/manufacturer guidelines to select single use equipment accessories (where appropriate) and products to check packaging is intact, expiry dates, batch numbers and select new unused disposable, single use needles/treatment heads/cartridges considering size and configuration (as appropriate) adhering to compliance
- Appropriate preparation for area(s) to be treated and how this can vary in accordance with the treatment protocol, techniques used and supplier/manufacturer guidance
- Prepare, open, load and dispose of single use equipment accessories following supplier and manufacturer protocols and adhering to compliance for hygiene, sterilisation and treatment application
- Methods of treatment application in line with supplier/manufacturer protocols working methodically and systematically, in a specified order, using the correct angle, pressure, settings and techniques, supporting/manipulating the skin and adapting treatment to ensure even coverage of the treatment areas/zones worked to achieve the desired effects and outcome in line with agreed treatment plan
- Feedback regarding treatment sensation, client comfort, tolerance and wellbeing to be checked with client throughout treatment using the 1-10 pain threshold scale
- Observation and correction of desirable and undesirable implantation of treatment product and skin reaction, topical anaesthetic/numbing agent (if appropriate) and skin recovery products used in the salon
- Complications management – knowing how to deal with and manage unlikely and rare incidents of; unexpected results, adverse reactions including; anaphylaxis, infections, vascular occlusions, ecchymosis/bruises, Tyndall effect, oedema, prophylaxis herpetic infection, delayed onset of nodules, ptosis and necrosis

- Understand the effects and use of hyaluronidase, the necessity of referral and why use of hyaluronidase must only be administered by a medical/qualified professional and the legal implications of administering prescription drugs by unqualified personnel. Frequency of treatments and associated timeframes, process of healing and the expected outcome, longevity of results and number of treatments likely to achieve desired optimal results including any maintenance treatments with associated timeframes, area conditions and skin types suitable and unsuitable for mesotherapy techniques

Contra-indications that would prevent or restrict treatment

Taught content

- Prevent (absolute contra-indications) – allergies to surgical grade stainless steel, anti-coagulant medications, blood borne diseases, contagious skin diseases, extremely sensitive skin, haemophilia, history of drugs with photosensitising potential, inflammations and swellings, isotretinoin, open wounds, pregnancy, breastfeeding, recent scar tissue, severe active acne, skin cancer and undiagnosed lumps, any conditions not covered by insurance policy
- Restrict (relative contra-indications) – abrasions, active inflammatory dermatoses (for example psoriasis), anxiety, bruises, current medications, cuts, diabetes, epilation, epilepsy, herpes simplex, history of scarring, atrophy, hypertrophic and keloid scarring, Intense Pulsed Light (IPL) or laser in the treatment area, large moles, long term anti-inflammatory use, non-steroidal anti-inflammatory drugs (NSAIDs), piercings, poor mental and emotional state, prior cosmetic surgery, recent botulinum toxin injections or dermal fillers, recent cosmetic skin peels, sensitive or excessively reactive skin types, supplements and herbal remedies, recent UV exposure and varicose veins, active suntan, artificial tan, blood donation

Contra-indications requiring medical referral and referral processes

Taught content

- Contra-indications to mesotherapy techniques requiring medical referral such as active acne, any condition already being treated by General Practitioner GP/dermatologist, any radiation treatment, certain medications including anti-coagulants, diabetes, evidence of medical conditions such as cardiac, hepatic or renal disease, recent surgery, undiagnosed swelling in treatment area, asthma (which may be exacerbated), nervous/psychotic conditions
- Actions to take in relation to specific contra-indications when referring clients
- Knowledge of organisation protocols for not naming specific suspected contra-indications when encouraging client to seek medical advice, encourage clients to seek medical advice without alarm or concern
- Reasons for not diagnosing suspected contra-indications due to professional status, acknowledging the need for medical training to be able to diagnose
- Skin cancer is an ever-prevalent issue. Areas of skin or moles that have uneven asymmetry, irregular, ragged or blurred borders, uneven patchy colour or an altered diameter than previously noted, need to be identified and the client encouraged to go to their GP as a precaution. Knowledge of organisation protocol for not naming or diagnosing specific suspected contra-indications when encouraging client to seek medical advice, acknowledging the need for medical training to be able to diagnose without causing undue alarm. Refer in a discrete and empathetic manner. Knowledge of the ABCDE guide – Asymmetry, Border, Colour, Diameter, Evolving size

When to consult with other aesthetic/medical professionals

Taught content

- Recognise when additional information is needed from other clinicians/medical professionals involved with the client and how this can be obtained in compliance with confidentiality and consent guidance and in line with current data protection legislation
- Recognise when and what other aesthetic products/skin rejuvenation treatments can be used in conjunction with mesotherapy techniques to maximise results
- Alternative treatment options when mesotherapy is not appropriate or contra-indicated

Hazards and risks

Taught content

- Identification of hazards and risks through risk assessment
- Putting procedures in place to ensure they are minimised:
 - Proper training for all staff
 - Protocols to follow during consultation
 - Written and verbal post-care for client
 - Adherence to supplier/manufacturer guidelines
 - Written and verbal post-care for client
- Avoidance of sharps injuries
- Implications of blood borne diseases, redness, swelling, weeping skin, milia (rare), hyper-treatment, cold sores, acne outbreak, viral infection, bacterial infection and scarring
- Potential associated risks with the options for pain management using topical anaesthetic/numbing agents
- Adherence to suppliers' /manufacturers' guidelines regarding moving, storage, maintenance and servicing, sanitising, operation
- Implications of not conducting safety checks, testing, quality assurance testing and preventative maintenance
- Avoidance of contra-actions and adverse reactions – allergic reaction, excessive histamine reaction, anaphylaxis, dizziness, fainting, nausea, compromised healing process, bruising, scarring, hyperpigmentation, sensitivity, irritation, infection, papules, pustules, herpes breakout, excessive oedema, swelling, pain, migration of product, vascular occlusion (rare), necrosis (rare), blindness (rare)
- Risks associated with compromised tactile response in the treatment area post-surgery/trauma
- Hazards of performing mesotherapy techniques in areas that are pigmented or contain pigmented lesions and how to respond
- Risks associated with performing mesotherapy over vitiligo and the precautions to performing mesotherapy over atrophy, hypertrophic and keloid scarring

LO2 Critically analyse accepted protocols and guidelines for providing mesotherapy techniques

Factors to consider when treatment planning
<p data-bbox="204 367 392 398">Taught content</p> <ul style="list-style-type: none"> <li data-bbox="204 423 1382 667">• Identify client's 'wants', needs, expectations, anticipated costs, aims and treatment objectives to agree realistic outcomes against client expectations, discuss pain and pain management, expected treatment sensations, pain tolerance, and potential risks relevant to the mesotherapy techniques to be performed, expected outcome, healing process, longevity of results and likely number and frequency of maintenance treatments required with associated time frames and the importance of considering the physical and psychological wellbeing of the client to receive mesotherapy techniques <li data-bbox="204 674 1382 913">• Results from skin tests and skin analysis classification and characteristics, identification and discussion of skin type and skin density including Fitzpatrick skin type, Glogau photo damage, Lancer scale, phenotype and genotype, skin conditions and/or lesions present, specific areas of concern to assist in choice of the appropriate treatment and to identify realistic and achievable treatment outcomes taking into consideration the natural progressive ageing of the client, and further treatment recommendations with appropriate intervals to maintain results <li data-bbox="204 920 1302 1093">• Identify client's medical history, emotional and physical condition, previous treatments to improve skin appearance, previous treatments on the skin in the area to be treated, sun exposure/tanning history, fake tan application, skin classification and skin condition to assist in choice of the appropriate treatment and to identify realistic and achievable treatment outcomes <li data-bbox="204 1099 1302 1171">• Identify any absolute or relative contra-indications that prevent or restrict treatment to ensure client is safe for treatment or if medical/other professional referral is required <li data-bbox="204 1178 1366 1279">• The importance of acknowledging and understanding when underlying factors will affect the success of the treatment and of selecting treatment specifications and variables to suit different skin classifications and skin types <li data-bbox="204 1285 1366 1386">• Previous skin/body salon treatments – details of type of treatment, frequency, dates the treatments were received, to ensure enough time has passed for mesotherapy techniques to be appropriate and to gain an insight into the client's approach to aesthetic treatments <li data-bbox="204 1393 1350 1464">• The importance of planning treatment times after previous skin rejuvenation treatments to ensure sufficient time has passed for mesotherapy techniques to be appropriate <li data-bbox="204 1471 1366 1543">• Satisfaction and results. Red flags for body dysmorphic disorder (BDD). Client with unrealistic expectations. Protocols for how this should be managed <li data-bbox="204 1550 1366 1621">• Legal aspects of the responsibilities of the practitioner in providing mesotherapy techniques and the importance of working within the remit of qualification boundaries and competence <li data-bbox="204 1628 1366 1800">• Factors that may positively or negatively influence treatment results for example general health, previous skin rejuvenation methods, age, rate of cell regeneration, and consideration of other factors that may inhibit response to treatment and collagen production such as diet, lifestyle, stress, smoking, alcohol, medications, illness, environmental stress, hormonal influences, photo damage <li data-bbox="204 1807 1366 1973">• Pre and post treatment advice including any benefit for specific skin preparation treatments and optimal intervals prior to commencing mesotherapy techniques, possible contra-actions, post treatment expectations and associated timeframes, healing process including the effect of the healing process on results, recommended skin care/post care and lifestyle advice or restrictions to ensure client is suitable for the treatment planned

- The number of treatments required for optimal results are dependent on the size and extent of the area and condition to be treated, aftercare, home care and client compliance. Consult with recommended guidelines and recommendations from manufacturer training
- Potential cost of treatments including fee structures and treatment options, frequency, duration and potential number of treatments recommended to achieve desired treatment outcomes and maintain results including likely associated timeframes
- Treatment plan should be clearly agreed between the client and practitioner and recorded on the consultation documentation with client signing to indicate informed client consent
- Cooling off period to ensure the client has the correct pre-procedural skincare and has time to digest the information as well as treatment outcomes matching with expectations

Assessing skin characteristics

Taught content

- Assessed through questioning during a face-to-face consultation and observation of skin, importance of using skin diagnostic equipment such as, Woods Lamp, light magnifier/glasses, skin scanner/diagnosis technology
- How to assess and recognise skin health characteristics Fitzpatrick scale 1-6, Glogau photo-damage, Lancer scale, hereditary and ethnic influences, level of sensitivity/damage, thickness of skin, epidermal thickness, quality of dermal tissues, healing capacity, surface hydration levels, pigmentation, photo/sun damage, vascular lesions, primary and secondary lesions, irregularities, chronological skin ageing, congestion/excessive oil, skin texture/pore size and static and dynamic wrinkles
- Importance of how to match mesotherapy techniques appropriately to various skin characteristics, skin classifications, indications, individual's treatment area(s), treatment aims and objectives
- Reasons for choosing different mesotherapy techniques and application modalities and protocols – devices, needles/treatment heads/cartridges sizes and configurations, selecting, mixing and/or diluting various treatment products, and using/adapting/combining different various techniques to suit the variations in all skin classifications, skin sensitivity, thickness of epidermis and dermis, area being treated, desired effects and agreed treatment objectives
- Treatment area and size including adjacent/surrounding skin tissue, skin integrity, skin type, skin condition, specific skin conditions present, individual/localised lesions vascular lesions, primary and secondary lesions, irregularities
- Scars and scar tissue – characteristics, age and reasons for scarring, mature scar, immature scar. Type of scar, for example superficial macular scars – burns, surgery, accidents, insect bites, acne, chicken pox, stretchmarks
- How to adapt follow-on treatments taking into consideration results from previous treatments – healing, treatment product retention, client behaviour and adherence to aftercare

Pre and post treatment advice to provide to the client

Taught content

- Provide consultation and allergy/products sensitivity tests where required, following manufacturer's instructions at least 48 hours prior to actual treatment to discuss outcomes and pre-treatment preparation
- Active skin care of a high/professional strength concentration may need to be avoided for 5-7 days such as retinoids and AHA/BHA skincare products, depending on strength, 2-4 weeks pre and post mesotherapy techniques, up to 6 months for Roaccutane. Low strength should be avoided 48 hours post treatment. Post treatment skincare products must be used as advised and in accordance with manufacturer/supplier recommendations
- Understand the types of pre and post-treatment products available and why they are necessary – typical products used may include; sunscreen (minimum SPF 30), tyrosinase inhibitors anti-oxidants, growth factors, vitamin A (non-prescription), retinol, vitamin C, vitamin B3, humectants such as hyaluronic acid, peptides, matrix metalloproteinase (MMP) inhibitors, topical cosmetic formulations recommended in conjunction with mesotherapy to enhance effects and improve health and condition of skin, AHA/BHA based cleansers, moisturisers and serums to enhance effects of mesotherapy
- The types of prescription topicals prescribed by a healthcare professional and how it impacts and/or supports the skin priming programme and can enhance/inhibit skin healing such as Accutane, Isotretinoin, Aspirin
- Any pre-treatment advice and specific preparatory topical skin care/skin rejuvenation programmes that could be given to clients to improve skin health and condition, minimise side effects and optimize results of mesotherapy and why they must be relevant to skin type, Glogau photo damage, Fitzpatrick skin type and skin condition. The positive effects of mesotherapy on a compromised skin condition, advantages and disadvantages
- Diet and lifestyle factors that could positively or negatively impact the effects of treatment including current skincare regime and any revisions required
- Use of general 2-4 weeks' skin preparation programme at home to improve hydration, skin cell health and general texture/condition of the skin. To improve healing capacity and effectiveness of mesotherapy techniques which may include a course of treatments such as microdermabrasion for scars/stretchmarks up to one month or more prior
- Fitzpatrick 3-6 and hyper-pigmented 1-2 may be prone to post-inflammatory pigmentation (PIH) following mesotherapy procedures and must use tyrosinase inhibitor pre-treatment products to reduce the risk of PIH, preparatory products may be used longer for all Fitzpatrick skin types that are particularly prone to pigmentation or post inflammatory hyperpigmentation (PIH)
- 30 days prior to treatment – importance of not sunbathing/using sunbeds, 10 days – 2 weeks prior to mesotherapy to avoid the use of self-tanning products as certain procedures may push pigment deeper into skin layers. Wear a minimum SPF30+ broad spectrum UVA and UVB protection daily
- Active herpes simplex is contra-indicated however clients with inactive herpes simplex should be advised to take prescribed or over the counter (OTC) prophylactic antiviral medication or apply topical antiviral cream up to 2 days before treatment and up to 3 days after treatment
- Avoid alcohol and caffeine 48 hours before and after treatment
- Physical sensation of treatment dependant on the techniques employed during treatment – the client may feel sensitivity – mild to moderate discomfort, may feel like skin is being pricked or scratched, sense of stinging depending on the application technique used, some may feel pressure or pain

- Post-treatment physical sensation and reaction. All clients should be advised that physical sensations and effects post-treatment vary for each client and depend on size of area treated, the techniques performed and individual skin characteristics but may experience mild erythema, slight itching/burning sensation for 5 minutes after injections (particularly with Vitamin C), possibility of small haematomas, blood spotting
- Contra-actions and adverse reactions – what they are, why they appear and how long they may last; for example allergic reaction, excessive histamine reaction, anaphylaxis, dizziness, fainting, nausea, compromised healing process, bruising, scarring, hyperpigmentation, sensitivity, irritation, infection, papules, pustules, herpes breakout, excessive oedema, swelling, pain, hypertrophic or keloid scarring, migration of product and rarely vascular occlusion, necrosis, blindness. How to manage complications or adverse reactions at home and when to refer to a medical practitioner, if concerned contact therapist in the first instance
- Clients should be given access to a 24/7 emergency contact number, ideally the practitioner, if the practitioner is unavailable access should be given to a deputising practitioner
- Provide verbal and written post treatment aftercare advice gaining signed agreement from the client accepting results and agreement to adhere to aftercare advice given
- Post treatment skincare products to be used. Post treatment hypo/hyper-pigmentation. Sun avoidance is essential – physical SPF minimum 30 and UVA/UVB broad spectrum protection daily
- Activities to avoid that might cause contra-actions or adverse reactions, extremes of temperature and heat, contact with water, activities which cause sweating, exposure to UV light, avoid excessive touching massaging or exfoliating the area
- Advice offered on alternative treatments if mesotherapy is found unsuitable for example; prescription products, tyrosinase inhibitors, dermaplaning, microdermabrasion, LED, IPL, HIFU, radiofrequency, ultrasound, depending on the condition being treated

Timing and intervals of treatments

Taught content

- Identify and understand commercial timings for and intervals between treatments
- Recognise variations in timings depending on the type and size of area to be treated, treatment to be performed, mesotherapy techniques used and depending on client sensitivity/tolerance
- Identify and understand post treatment expectations and associated timeframes including desired final outcome and longevity of results
- Identify and understand the possible need for further treatments to ensure results are maintained and associated expected intervals and timeframes

Pain threshold, sensitivity variations and testing

Taught content

- Understanding inflammatory response of the skin and the effects and associated risks of using over the counter (OTC) pain relief such as non-steroidal anti-inflammatory drugs (NSAIDs), and topical anaesthetic/numbing agents (if appropriate) and the possible affect they may have on treatment and the healing process
- Recognising skin health/types and areas that are more sensitive, fragile and reactive to topical applications
- Reasons why treatments will be more uncomfortable and not advised during menstruation or ovulation
- Referring to supplier/manufacturer guidance where patch testing is required to be performed, during initial consultation following supplier/manufacturer's instructions for timings
- Recording of results to include date, location of test, products used, batch numbers, description of results including any visible or sensory response
- Any change of mesotherapy products or strength to be tested prior to use where indicated and recorded in treatment details
- How to complete results of thermal and tactile testing for benchmark on reaction to stimuli
- Based on patch test results, how and when mesotherapy can be performed

Preparation and selection of equipment and products for treatment

Taught content

- Reasons for appropriate selection, preparation and use of PPE – disposable non-latex gloves, apron/gown, hair covering
- Understanding how to set up and work within a clinically clean field/sterile field and when either would be necessary for the mesotherapy technique to be performed, how to prepare equipment on clean trolley in an ergonomic manner to prevent strain to the practitioner and to assist in the smooth application of treatment
- Why and how it is necessary to select and prepare all appropriate products, equipment and accessories before start of each treatment, checking appropriate products and equipment are being used for treatment including mesotherapy application equipment required (electroporation device and any associated accessories, syringe and needles/skin injection therapy (SIT) attachment /mesotherapy gun), treatment preparation products, cleansers, skin antiseptic, topical anaesthetic/numbing (if appropriate), white cosmetic pencil and sharpener, mesotherapy activating solutions and products, mirror, swabs and disposables and appropriate waste bag, biohazard waste sharps box for disposal
- Understand why it is necessary to identify the client's primary concerns and treatment objectives to select the correct activating solution/treatment cocktail and why and how it may be necessary to mix or dilute treatment products depending on the desired outcome in line with supplier/manufacturer guidelines
- Understand why and when it may be necessary to mark treatment area to ensure accuracy of treatment depending on application techniques used

Preparing the area prior to treatment

Taught content

- Cleanse the skin prior to treatment – to remove all make-up, creams/lotions, surface oils and debris. Typical products used – cleansers, toners, skin antiseptic
- Use of topical aesthetic/numbing (if appropriate) and depending on method of mesotherapy application
- Mark out treatment area with a sharpened white cosmetic pencil where necessary to ensure treatment precision
- Preparation of area to follow supplier/manufacturer guidelines which may include additional preparation to enhance penetration of mesotherapy solution applied such as enzyme peel prior to some methods of electroporation
- Apply appropriate Personal Protective Equipment (PPE) – disposable head covering, cover areas not being treated

Adaptations to treatment

Taught content

- How to adapt the treatment to take into account pre-existing conditions/lesions such as moles and other areas to avoid
- Why it may be necessary to adapt and adjust application of mesotherapy depending on the method used
- Treatment progression and adaptations to future treatments to maintain the desired outcome with associated timeframes and any beneficial additional or complementary treatments
- Areas suitable and unsuitable for treatment and how mesotherapy techniques or application modalities may be combined or adapted to enhance results

Contra-actions, adverse reactions and complications management

Taught content

- Effects and risks of using excess pressure, incorrect angle of insertion speed, uneven techniques and treatment product distribution or non-compliance to safety and hygiene practices on the final result
- Specific risks for mesotherapy such as allergic reaction, excessive histamine reaction, anaphylaxis, dizziness, fainting, nausea, compromised healing process, bruising, scarring, hyperpigmentation, sensitivity, irritation, infection, papules, pustules, herpes breakout, excessive oedema, swelling, pain, hypertrophic or keloid scarring, migration of product, and rarely vascular occlusion, necrosis, blindness
- How to manage complications or adverse reactions at home, if concerned contact Mesotherapy practitioner in the first instance; and when to refer to a medical practitioner
- Clients should be given access to a 24/7 emergency contact number, ideally the practitioner, if practitioner is unavailable access should be given to a deputising practitioner
- Complications management – recording consultation processes and treatment outcomes, managing client expectations vs results, prevention of sharps injuries, first aid training, first aid and emergency treatment kits, anaphylaxis training, basic life support
- Complications management systems and protocols – Practitioners should keep individual contemporaneous records of activity in either digital or paper format, information to be included: date, time, non-identifiable client ID number, practitioner name, indication, product/technique used, anatomical location, complications/adverse events, actions taken

- Importance of knowing how to deal with and manage incidents of, client dissatisfaction with results, unexpected results. When and how to refer to a medical/qualified practitioner in the event of adverse reactions including: anaphylaxis, infections, vascular occlusions, ecchymosis/bruises, Tyndall effect, ptosis, necrosis, oedema, prophylaxis herpetic infection, delayed onset of nodules
- Procedures for complication management or removal and their limitations and effects on mesotherapy – aspiration of product, massage, compress, saline and when to refer to a medically qualified practitioner for chemical removal if required
- The need of to have a qualified first aid practitioner with an up to date First Aid at Work qualification or equivalent
- Every client must be given the opportunity to feedback outcomes at the end of every treatment
- Review of compliments and complaints must have a local quarterly review of outcomes and an audited annual appraisal on performance activities where outcomes are discussed

Benefits and use of inhibitors

Taught content

- Understand melanogenesis and the enzyme tyrosinase, where it is located and its function
- Understand how tyrosinase inhibitors can reduce the production of melanin and how this can protect against post-inflammatory hyperpigmentation
- Knowledge of tyrosinase inhibitors and melanin suppressors, such as azelaic acid, bearberry, liquorice root extract, ascorbic acid, kojic acid, niacinamide, L-arbutin and hydroquinone

Treatment progression and additional/complementary treatments recommendations

Taught content

- Advice regarding post treatment expectations and associated time frames with regard to healing and how the healing process affects treatment products and the longevity of results
- Recommendations for appropriate intervals between treatments depending on area treated and treatment objectives, changes to needle/cartridge configurations and techniques to create particular effects, home care to be followed
- Complementary products/treatments to be used in conjunction such as topical transdermal products or iontophoresis. Knowledge of progressive remedial treatments and products as appropriate for the skin health/condition/type to promote healing and give protection
- Fitzpatrick skin classification and Glogau photo damage and knowledge of how the skin benefits and responds to mesotherapy. Knowledge of post treatment expectations and associated time frames, maintenance treatment timings and use of appropriate skin care programmes at home to encourage healing and prolong treatment effects
- Lifestyle factors and changes that may be required to improve effectiveness of treatment – skin/body care routine, healthy eating, exercise and sun protection

LO3 Critically analyse the uses, limitations, benefits and effects of mesotherapy equipment, products and techniques

Types and purpose of mesotherapy equipment and products

Taught content

- Mesotherapy was invented by French doctor, Dr Michel Pistor, in 1952. Initially used to treat medical conditions such as pain, osteoarthritis and fibromyalgia, French surgeons realised mesotherapy was most effective in treating skin conditions such as wrinkles and cellulite. When injected into the skin, the ingredients stimulated the growth of new collagen and elastin. This resulted in brighter, healthier skin, this discovery also led to a wider number of ingredients being used such as hyaluronic acid for promoting skin health
- Differentiate between various mesotherapy application methods and techniques used in treatment application:
 - No needle hyaluronic pen device – uses high pressure to push mesotherapy products into the skin. (This method is no longer considered to be safe and must not be used)
 - Electroporation – devices use radio frequency or ultrasound to increase the permeability of the cell membrane to absorb mesotherapy products into the dermal layer and is available with no needle and needle options
 - Meso-needling, uses a skin roller or automated skin needling device to deliver specific mesotherapy products into the epidermal layers of the skin
 - Skin injection therapy (SIT) uses a special attachment to help control injection depth
 - Injection method – performed free hand using disposable syringes and needles
 - Mesotherapy Gun an automated device that allows fully controlled precise delivery of product
- Treatment products – cleansers, skin antiseptic, topical aesthetic/numbing (if appropriate), mesotherapy single component activating solutions/cocktails, calming and soothing products, products to minimise infection (antibacterial solution or cream, prophylactic herpetic treatment), products to promote healing, sun protection factor (SPF) and aftercare in line with supplier/manufacturer guidelines
- Mesotherapy single component/cocktail activating solutions infuse the superficial dermis with potent vitamins, vasodilators, and antioxidants to rejuvenate and revitalise the skin, organic, inorganic, synthetic, bioidentical, advantages and disadvantages, effects and uses of ingredients to include:
 - Hyaluronic acid (HA)
 - Vitamin A
 - Vitamin B complex – vitamins B1 (thiamine), B2 (riboflavin), B3 (niacin), B5 (pantothenate), B6 (pyridoxine), B9 (folic acid), and B12 (cyanocobalamin)
 - Vitamin C
 - Vitamin E
 - Vitamin K
 - Vitamins D (calcitriol)
 - Vitamin H (biotin)
 - B10 (aminobenzoic acid)
 - Amino acids/Peptides
 - Minerals
 - Coenzymes
 - Nucleic acids
- Treatment effects – skin rejuvenation

Uses, limitations, benefits and effects of mesotherapy techniques

Taught content

- Mesotherapy enhances the appearance by depositing active ingredients such as vitamins, minerals, enzymes and antioxidants into the upper dermal layers on the face or body to rejuvenate skin and can also be used to improve hair quality and help with localised removal of excess fat. Mesotherapy also stimulates release of growth factors as part of the wound healing mechanism
- Products used during and post-treatment – single component applications and treatment cocktails for trans epidermal penetration during treatment and post treatment – hyaluronic acid, vitamins, minerals, amino acids, peptides, enzymes, anti-oxidants, hydroxy acids, tyrosinase inhibitors
- Limitations of equipment and products used for mesotherapy techniques, wide availability of rollers/automated devices not produced to current industry regulations and compliance, poor quality steel, ineffective sterilisation and blunt needles
- Limitations, benefits, advantages and disadvantages
 - No needle hyaluronic pen device – uses high pressure to push mesotherapy products into the skin by creating a hole with a diameter of 0.17mm which is two times smaller than the thickness of a needle. Due to the many problems resulting in contra-actions caused by easily accessible low quality and poorly mass manufactured devices and subsequent poor performance/misuse this device is not considered safe for the delivery of mesotherapy and its use has been banned in many countries and continents including the USA, Canada and Europe
 - Electroporation – devices use radio frequency or ultrasound to increase the permeability of the cell membrane to absorb mesotherapy products into the dermal layer, depending on the device used mesotherapy can be delivered with or without needle/cartridge attachments. Needle free options have obvious advantages over needle options as they are painless and have minimal risk of contra-actions or adverse reactions and no downtime
 - Meso-needling – skin roller or automated skin needling device to deliver mesotherapy products into the epidermal/dermal layers of the skin working the mesotherapy solution into the skin via the channels made by the needles. Easy addition from a regular skin needling treatment and offering added benefits from the active solutions and ingredients mesotherapy products have to offer. Rollers must be sterile, single use and opened for each treatment, more than one roller may be needed per treatment to vary size/depth of needles used on one client adding to cost, large item to dispose of every treatment. Automated devices can vary needle depth using a device with smaller single use sterile disposable unit/cartridge for each treatment
 - Skin injection therapy (SIT) – uses extra-fine needles to introduce mesotherapy products to the papillary level of the dermis avoiding damage to the skin's superficial nerves and vessels. SIT injector (like an upside-down funnel housing a 2/4 mm-long needle of extra-fine 0.27 mm (32G) diameter) is fitted in a normal or Luer-lock syringe/connector. The external edge of the funnel-shaped injector is placed on the skin, using little pressure, stretching the skin to facilitate penetration of the needle in the centre of the funnel making injection of the mesotherapy product painless and nontraumatic. Once the established dose of the mesotherapy product has been injected, pressure is released and the injection hole is closed by elastic return of the skin. A small drop of active ingredients will remain on the skin surface due to the discharge of the pressure of the syringe's rubber piston and will be absorbed after a while. Advantages of this procedure; painless injections, reduced hematomas, slow absorption of product causes it to remain locally active for a long time, limited risk of injury

- Injection method – performed free hand using disposable syringes are used with sterile 4 mm (27/30G) needles to perform intradermal micro injections limited to the superficial papillary dermis (1.5-2 mm) to deliver approximately 0.10-0.20ml of the mesotherapy product per injection at 30, 45, 60o angle. Easily adapted for client specific requirements or areas of concern and skin lesions. Techniques include: picotage, nappage, point-by-point, linear threading, crosslinking/crosshatching. The injections should be placed 1-2cm apart and the total amount of injected mesotherapy product should not exceed 3-5ml precise, bespoke treatment but needs skill in application and can be time consuming
- Mesotherapy Gun – an automated device that is an automatic device powered by pneumatic pressure generated by an air compressor and generally has two basic functions which allow fully controlled precise delivery of product and controlled depth of injection by either point-by-point or continuous injection bursts to all areas treated. Depending on the device injection rates can be adjusted in frequency from 1 every 3 seconds up to 300 per minute thus allowing a more rapid procedure. No pain, no product backflow, no risk of hematomas and significantly less down time
- Treatment products – mesotherapy activating solutions infuse the superficial dermis with potent vitamins, vasodilators, and antioxidants to rejuvenate and revitalise the skin and or hair, encourage localised fat reduction. Organic, inorganic, synthetic, bioidentical, advantages and disadvantages, effects and uses:
 - Hyaluronic acid (HA) – hydrates the skin through a higher water-binding capacity and builds up the extracellular matrix, reactivates fibroblasts and induces the synthesis of new collagen, elastin, and endogenous HA, fights free-radicals
 - Vitamin A – regulates turnover of the epidermis and acts on skin flexibility, helps healing and partially corrects dermis atrophy
 - Vitamin B complex – vitamins B1 (thiamine), B2 (riboflavin), B3 (niacin), B5 (pantothenate), B6 (pyridoxine), B9 (folic acid), and B12 (cyanocobalamin) – are coenzymes in several metabolic processes that help to fight free radicals and promote healthy skin and hair
 - Vitamin C – antioxidant that brightens and evens skin tone, reduces redness, anti-inflammatory, stimulates collagen synthesis and inhibits melanin acting together with vitamin E
 - Vitamin E – strong antioxidant because of its anti-free-radical activity, humectant and hydrating
 - Vitamin K – boosts microcirculation, antioxidant, anti-inflammatory and fights free radicals
 - Vitamins D (calcitriol) – contributes to cell repair and metabolism, enhances skin immune system and destroys free radicals
 - Vitamin H/B7 (biotin) – necessary for the metabolism of carbohydrates, fats and amino acids
 - Vitamin B10 (aminobenzoic acid) plays a significant role in many processes, protects from aging
 - Vitamin B8 (inositol) – humectant, hydrating and assists with maintaining firmness
 - Amino acids/Peptides cocktail – contains amino acids, which are stable, water-soluble and part of the structure of proteins, builds polypeptides which form the matrix of cellular architecture. Restructure/repair protein structures of tissues/cells damaged by photoaging, smoking, or other causes of extrinsic ageing
 - Minerals – sodium, potassium, calcium, iodine, manganese, copper, zinc, selenium, iron and magnesium act as catalysts of numerous cell functions for skin and hair health
 - Coenzymes – non-protein organic components aid the catalytic function of enzymes and activate biochemical reactions to assist cellular turnover of the dermis

- Nucleic acids DNA and RNA encode the information for polypeptide and protein synthesis from amino acids, decrease number of fibroblasts and loss of interstitial cohesion
- Phosphatidylcholine – antioxidant is derived from natural soy lecithin. Alters metabolism of fatty substances such as cholesterol and triglycerides in the body
- L-Carnitine – required for delivery of fatty acids into cells, where it can be burned as a source of fuel
- Caffeine – increases blood flow and stimulates fat cells to release fat into the blood stream to be burned by the body's metabolism. Tightens and tones skin
- Aminophylline – stimulates the release of fat into the bloodstream. Effectiveness is similar to caffeine however is less stable, has a very short shelf life and must be kept in cool conditions. Encourages beta receptors to burn fat more efficiently
- Yohimbine (iombina) – an alkaloid found in the inner bark of a tree that grows in South Africa (Corynanthe yohimbe). Targets localised fat and has a lipolytic effect
 - Physical benefits and effects – Stimulate neocollagenesis (new collagen production) and neovascularisation (formation of functional microvascular networks) due to the result of growth factors being released following controlled trauma to the stratum corneum into the lower layers of the skin
 - Understand release of growth factors as part of the wound healing mechanism due to mesotherapy techniques
 - Understand stages of wound healing in relation to mesotherapy techniques; wound healing – haemostasis instant phase, inflammatory phase (occurs immediately following injury and lasts approximately 6 days), proliferation phase occurs at the termination of the inflammatory phase and can last up to 4 weeks), remodelling phase (begins at the 4th week and can last for years as the scar matures)
- Visible effects are not limited to and can include;
 - Improved overall skin condition and health
 - Improvement in fine lines and wrinkles
 - Brightening effect
 - Hydrating
 - Diminish stretch marks
 - Skin tightening
 - Improvement in appearance of scars
 - Refinement of pores
 - Even skin tone and colour
 - Reduction in appearance of pigmentation
 - Fat reduction
 - Improvement of contours
 - Improvement of hair quality
 - Reduction of hair loss
- Limitations of each mesotherapy treatment technique in relation to specific client requirements or treatment indications
 - Associated hazards and risks of mesotherapy including contra-actions and adverse reactions
 - Cannot remove deep wrinkles or scars
 - Cannot cure baldness
 - Several treatments may be required to achieve optimal results
 - Treatment effects may need regular maintenance treatments to ensure results are maintained
 - Complications management

Method of application

Taught content

- Follow specific supplier/manufacturer protocols for each type of mesotherapy delivery technique; Electroporation, Meso-needling, Skin injection therapy, Micro-injection method, Mesotherapy Gun
- Mark out the treatment area if and where appropriate to ensure treatment precision
- Plan treatment start and end point
- Magnify and illuminate the treatment area
- Work systematically and methodically, avoiding excess treatment overlap across the areas be treated
- Support the skin and manipulate as appropriate to ensure effective mesotherapy activating solution implantation and even distribution as appropriate to the aims and objectives of treatment
- Adapt the treatment to suit the client's physical and psychological needs
- Problems associated with uneven treatments, and how poor treatment techniques may impact on the final result
- Work within the agreed treatment area and avoiding contraindicated areas
 - Know what action to take if client discomfort or skin reaction appears to be excessive, when and how to modify, adapt or stop treatment
 - Apply cooling products/aftercare where appropriate to soothe treatment areas, follow supplier/manufacturer recommendations regarding the application of topical preparations and physical SPF factor 30+

LO4 Formulate consultation, planning and preparation protocols for mesotherapy techniques

Use consultation techniques to determine the client's treatment plan

Taught content

- Consult with client to identify indications and client's treatment objectives, expectations and desired outcomes with associated timescales
- If required use visual aids to assist client understanding of the clinical outcomes expected. Give clear and appropriate advice and recommendations to the client to determine and agree the final treatment plan including associated timeframes and expected results
- All information from the consultation to be documented in the presence of the client – at the beginning of every treatment
- Obtain the client's agreement and signed informed consent to treatment and all required visual media records prior to all treatments
- The practitioner and client must understand the implications of informed client consent, what is being agreed and the responsibility of each in terms of liability

Consult with the client

Taught content

- General information
- Relevant medical history – discuss all areas on consultation documentation including any recent herpes simplex, certain medications including anti-coagulants
- Lifestyle information
- Skin classification and skin condition – hereditary and ethnic influences
- Explain the treatment process in line with supplier/manufacturer recommendations, the physical sensation and the appearance of the skin post-treatment. Discuss associated timeframes and changes associated with healing, explain any downtime requirements and activities to avoid post treatment
- Explain potential risks/side effects/expected reactions
- Carry out sensitivity tests in accordance with supplier/manufacturer guidelines and organisational requirements, record outcomes
- Explain complications management Finalise and agree the treatment plan, addressing client needs, expectations and treatment objectives
- Explain the cooling off period

Establish the condition of the skin

Taught content

- Use appropriate equipment and perform a visual assessment of the condition and health of the skin and surrounding area
- Establish skin characteristics
- Establish skin types, skin conditions
- Identify localised contra-indications that may restrict, prevent or require medical referral and note on the client's record card

Explain the treatment procedure to the client

Taught content

- Selection of mesotherapy techniques, preparation and activating solutions to be used
- Positioning required for treatment, ensuring client comfort and full access to treatment area(s)
- Tests required
- Preparation techniques
- Pre-treatment visual media records to be taken from all appropriate angles
- How the area will be mapped with white cosmetic pencil if necessary
- Where the treatment will begin, general order of application – to be applied in a methodical and systematic manner in line with supplier/manufacturer protocols avoiding excess treatment overlap, across the area
- The sensations of the treatment that are considered appropriate and the need to maintain verbal feedback with the client to check tolerance levels using the pain threshold scale of 1-10
- Explain the duration of treatment and how the treatment will conclude and what aftercare products will be used (where appropriate)
- Explain how the skin is expected to look and feel immediately after treatment
- Post treatment visual media records to be taken from all appropriate angles
- Explain the need to use a broad-spectrum sun protection UVB and UVA and the benefits of using a tyrosinase inhibitor
- Explain potential risks/side effects/adverse effects
- Aftercare and home care advice including the revision of skincare regime if applicable. Lifestyle changes needed to support and promote healing
- The importance of client compliance to adhere to aftercare advice given
- Access to a 24/7 emergency contact number, ideally the practitioner, if practitioner is unavailable access should be given to a deputising practitioner

Select appropriate mesotherapy formulation and method of application techniques

Taught content

- Select suitable equipment and products according to the treatment plan considering required depth of penetration to provide mesotherapy techniques including appropriate PPE
- Mesotherapy products/activating solutions/treatment cocktail selected should be suitable to meet the treatment objectives agreed at consultation and should also be suitable for the skin condition(s), skin type and classification so as not to cause undesirable results or complications
- Select the appropriate method for application and application type for mesotherapy techniques to be performed

Selection and preparation of mesotherapy technique applications

Taught content

- Electroporation device – equipment is cleaned, sanitised and prepared in line with supplier/manufacture instructions, single use sterile treatment head/cartridges, where used, are opened from a new sealed, sterile package in front of the client
- Rollers are single use sterile treatment head/cartridges are opened from a new sealed, sterile package in front of the client
- Skin needling devices sanitised and prepared in line with supplier/manufacture instructions, single use sterile treatment head/cartridges are opened from a new sealed, sterile package in front of the client, needle depth, duration and intensity and technique of application according supplier/manufacture instructions
- Skin injection therapy (SIT) – single use sterile SIT attachment and Luer-lock syringe/connector and needles are opened from a new sealed, sterile package in front of the client
- Injections – syringe and 0.4mm needle, single use sterile syringe and needles are opened from a new sealed, sterile package in front of the client
- Ensure selection of appropriate single use needles/treatment heads/cartridges with the correct configuration are new, sealed and prepared in line with health and safety guidelines for each client
- Check the condition and note the expiry date and batch numbers of needles/treatment heads/cartridges and that all sealed packaging is intact and record in the treatment details, discard any that are past their expiry date or have damaged packaging
- Load and check needles/SIT/treatment head/cartridges are loaded and secure in accordance with supplier/manufacture instructions
- Prepare correctly in accordance with supplier/manufacture guidelines and organisational protocols in readiness for treatment

LO5 Demonstrate proficiency in providing mesotherapy techniques

Maintain own responsibilities for health and safety through the treatment

Taught content

- Ensure working area is set up and a safe working environment created in line with health and safety protocols and legislation
- Ensure all surfaces are clean and hygienic, trolley is tidy, equipment and accessories are sanitised and products set out ergonomically
- Ensure use of sterilisation and disinfectants for surfaces as required for treatment are in accordance with supplier/manufacturer guidelines
- Ensure use of sanitisation and sterilisation for equipment and accessories are in accordance with supplier/manufacturer guidelines
- Clinically clean/sterile field to be prepared as appropriate depending on methods used for the delivery of mesotherapy and appropriate PPE to be worn and given to the client as required
- Work in an environmentally sustainable manner
- Ensure appropriate extraction, ventilation, temperature, ambience, lighting, wall and floor coverings are fit for purpose
- Ensure all equipment and accessories are in sealed sterile packs where appropriate or sanitised and in safe working order and ergonomically placed
- Ensure all products are available, in date and ergonomically placed
- Ensure risks and hazards have been checked for example slip/trip hazards in the working area
- Ensure treatment area is magnified and well lit

Prepare, position and protect the client and self

Taught content

- Ensure preparation complies with legal and organisational requirements
- Prepare and protect client to prevent cross infection. Protect client's hair where appropriate, protect and/or cover clothing, request removal of clothing as appropriate
- Ensure skin is cleansed, free of makeup, oils, lotions, deodorants, debris and sanitised with skin anti-septic (chlorhexidine)
- Apply anaesthetic/numbing agent (if appropriate) prior to mesotherapy treatment
- Apply appropriate Personal Protective Equipment (PPE) – disposable apron, disposable (non-latex) gloves, mask as appropriate
- Position the client to meet the needs of the mesotherapy treatment, clearly instruct the client and, if required, use supports or pillows to ensure the position fits the needs of the treatment, does not compromise the treatment application or cause the client any discomfort
- Ensure effective, ergonomic positioning of couch, trolley, stool, equipment, accessories, and products to avoid injury to self, client and others
- Ensure own posture and working methods minimise fatigue and the risk of injury to self, the client and others
- Depending on area to be treated provide modesty towels/disposable tissue to protect clothing and provide modesty so the client does not feel exposed and vulnerable

Safe use of equipment, accessories, materials and products

Taught content

- Follow protocols for safe use including correct use of mesotherapy equipment, syringes, needles, SIT attachment, automated devices, cartridge/needle configuration, settings, speed, angles, pressure, depth and techniques
- General equipment – disposable dressing packs, sterile gauze pack, cotton wool, cotton buds, couch roll, saline eye wash
- Mesotherapy equipment – Electroporation device and accessories as appropriate to the system and in line with supplier/manufacturer guidelines, Meso-needling device and sealed disposable treatment head/cartridge/accessories as appropriate to the system and in line with supplier/manufacturer guidelines, Skin injection therapy SIT attachment Luer-lock syringe, Injection single use syringe and 0.4mm needle, Mesotherapy Gun-automated device and accessories as appropriate to the system and in line with supplier/manufacturer guidelines
- Products – skin cleansers, topical numbing agent if appropriate, skin antiseptic, activating solution, hyaluronic acid, vitamins, minerals, peptides/amino acids, single component applications, cocktails, serums, aftercare products, antibacterial solution/cream, sun protection SPF 30+
- Ensure automated equipment is turned off and unplugged after treatment depending on manufacturer's instructions
- Follow protocols for safe disposal of sharps/cartridges/glass bottles in line with organisational procedures and supplier/manufacturer and local authority guidelines
- Ensure a waste receptacle is ergonomically placed for use throughout the treatment and sharps bin is appropriately placed

Provide mesotherapy techniques

Taught content

- Follow recommended protocol using adequate skin support and manipulating the skin to assist with effective implantation techniques and even distribution of treatment product and to avoid skin distension, tearing, bruising, excessive pressure or over treatment
- Divide area into small areas (zones), select starting point
- Work in a methodical and systematic manner checking client comfort and wellbeing throughout, taking breaks as necessary, to cover the area to be treated using the required treatment techniques
- Avoid uneven treatment, overlap or overworking the area
- Depending on the technique used adjust and adapt the angle, settings, speed, pressure, and depth of treatment techniques to suit the client's skin characteristics and treatment objectives, including adaptation for skin type and skin condition and client comfort.
Demonstrate various treatment techniques to create desired effects and treatment objectives
 - Electroporation – needle free devices follow supplier/manufacturer protocols
 - Meso-needling roller method – use skin roller in line with supplier/manufacturer protocols, changing roller to appropriate size as necessary throughout treatment to ensure even distribution of product
 - Meso-needling – adjust automated skin needling device in line with supplier/manufacturer protocols, vary needle depth as appropriate to all areas throughout treatment ensuring device is kept at correct 90° angle throughout treatment

- Skin injection therapy (SIT) – keeping the syringe at 90° place external edge of the funnel-shaped injector on the skin, apply a little pressure to stretch the skin and facilitate penetration of the needle and release the plunger. Once the established dose of the mesotherapy product has been injected, release pressure and move to next site 1-2cm apart
- Injection method – perform intradermal micro injections limited to the superficial papillary dermis (1.5-2 mm), deliver approximately 0.10-0.20ml of the mesotherapy product at 30, 45, or 60° angle placed 1-2cm apart. Adapt techniques as necessary to client needs and treatment objectives. Techniques include: picotage, nappage, point-by-point, linear threading, crosslinking/crosshatching Mesotherapy Gun – adjust depth of injection and delivery method in accordance with supplier/manufacture protocols, select either point-by-point or continuous injection burst as appropriate for agreed treatment plan and specific areas treated. Keep gun at correct 90° angle throughout treatment
- Continually discuss sensation and level of discomfort with client throughout treatment. Know when to stop/adapt or adjust the treatment as appropriate
- Ensure all aftercare is given verbally as well as written and encourage client to ask questions to clarify
- Ensure treatment is completed in a commercial time frame dependant on size of area and desired results and treatment objectives

Monitor the skin reaction and client response

Taught content

- Visually monitor skin reaction and client skin response and comfort levels and observation of desirable and undesirable clinical end points, degree of erythema, bleeding, and treatment product retention
- Adapt the treatment to suit the client's physical and psychological needs

Apply post-treatment products

Taught content

- Apply post-treatment products to calm, soothe and protect the treated area and promote healing following supplier/manufacture protocols and recommendations

Take post-treatment visual media records

Taught content

- Take post-treatment visual media records

Provide post care advice and homecare

Taught content

- Treatment area should be calmed post treatment to minimise redness and reduce client discomfort, to cool, soothe and protect where necessary in line with manufacturer protocols
- Gain client signature accepting treatment results, recovery process/downtime, receipt of aftercare advice and agreement to comply with aftercare
- Aftercare advice to be given:
 - Skin may feel tight, micro haematomas and erythema may be present, degree of erythema will depend on skin type and strength/type/penetration of mesotherapy
 - Follow supplier/manufacturer guidance regarding massaging and treatment products in the area
 - Use post treatment skincare as recommended to soothe and hydrate the skin
 - Avoid irritating skincare ingredients such as AHAs, or retinoids following manufacturer's instructions
 - Do not pick or scrub/exfoliate the skin as this could irritate and contribute to post inflammatory hyperpigmentation (PIH)
 - Avoid direct sun exposure and sun tanning for at least 4-6 weeks post mesotherapy treatment
 - Apply a physical and broad band spectrum sunscreen (UVA and UVB) with SPF 30 minimum daily
 - Make-up should be avoided for 48 hours – mineral make-up is preferable, applicators, sponges and brushes must be clean
 - Avoid hot tubs, swimming, saunas, vigorous exercise for 1-2 weeks
 - Avoid epilation, waxing or use of depilatories on the treated area for up to 2 weeks
- Treatment reaction will vary depending on mesotherapy products and techniques used, also skin type, skin classification and skin condition – always refer to supplier/manufacturer recommendations for each product and technique used
- Provide advice on suitable post-treatment products in line with supplier/manufacturer recommendations
- Advise client of how to manage any contra-actions or adverse reactions at home and when to seek medical advice
- Provide client with access to a 24/7 emergency contact number, ideally the practitioner, if practitioner is unavailable access should be given to a deputising practitioner
- Document post-treatment complications and adverse reactions with advice given in line with legislative, insurance and organisational guidelines
- Use reflective practice to evaluate the treatment and inform and provide advice for ongoing future mesotherapy treatments and other treatments which may be used in conjunction to optimise results
- Evaluation of the mesotherapy procedure to inform future procedures, collate, analyse, summarise and record information gained from client feedback, client records and own observations
- Follow manufacturers' guidelines in respect of treatment intervals
- Agree any alterations for future treatment with the client and record the outcome for further evaluation

Dispose of waste materials to meet legal requirements

Taught content

- Dispose of ALL waste from the treatment into biohazard clinical waste bags in line with local authority regulations/legislation and dispose of following COSHH procedures. Use SHARPS box where necessary
- Ensure compliance with protocols to avoid cross-infection when handling post-treatment equipment and dispose of needles/cartridges into sharps box handling safely and correctly
- Clean mesotherapy device and reusable accessories following supplier/manufacturer instructions and licensing requirements and store correctly

Update client records

Taught content

- Accurate completion of treatment details and treatment log recording all information on mesotherapy technique and accessories used, expiration dates, batch numbers where applicable, date, time, practitioner name, anatomical site, condition treated, skin preparation, skin quality, map of treatment area, activating solution used, application techniques and duration of treatment, depth of application, client skin sensation and skin response, observations of skin during and after treatment, after care and home care advice given
- Reflective practice used to evaluate the mesotherapy treatment and inform future treatments
- Gain client feedback at the end of every treatment, collate, analyse, summarise and record evaluation feedback in a clear and concise way
- Signature from client to be obtained accepting treatment results and skin response and agreement to comply with aftercare and follow all aftercare/post treatment advice
- Update logbook
- Practitioner signature to take responsibility for treatment and records completed
- Records filed and stored securely in line with current data protection legislation

Provide and manage post-treatment communications and outcomes

Taught content

- Advise client of expected reactions; mild erythema, slight itching/burning sensation for 5 minutes after injections (particularly with Vitamin C), possibility of small haematomas, blood spotting
- Communicate with clients regarding post-treatment care and concerns
 - Clients should be given access to a 24/7 emergency contact number, ideally the practitioner, if practitioner is unavailable access should be given to a deputising practitioner
- Inform client how to manage complications/adverse reactions at home and when to refer to a medical practitioner
- Provide and inform the client of protocol for formal complaints
- Document post-treatment complications and adverse reactions in line with organisation guidelines
- Protocol for escalating a formal complaint to management prior to a medical practitioner
- Review of compliments and complaints must have a local quarterly review of outcomes and an audited annual appraisal on performance activities where outcomes are discussed

COVID-19 infection prevention awareness

Please note this information will not be assessed for the achievement of this unit.

As the COVID-19 pandemic continues to evolve, public awareness and the importance of infection prevention has never been higher.

Professionals in the beauty and advanced aesthetics therapy industry work in close contact with clients; knowledge and understanding of how to prevent the spread of COVID-19 and work safely is essential.

Actions to take to help reduce the spread of COVID-19 and other respiratory infections and protect those at highest risk:

- Get vaccinated
- Maintain adequate ventilation
- Break the chain of infection:
 - Hand hygiene – hand washing and sanitising
 - Respiratory hygiene and cough etiquette
 - Decontamination of the working environment
- Use appropriate Personal Protective Equipment (PPE)
 - Use of face coverings or face masks

If you require any additional information, please refer to: <https://www.gov.uk/guidance/reducing-the-spread-of-respiratory-infections-including-covid-19-in-the-workplace>

<https://www.gov.uk/guidance/living-safely-with-respiratory-infections-including-covid-19>

If your learners are interested in learning more about COVID-19 infection prevention awareness alongside this qualification, VTCT offers the following qualifications: VTCT (ITEC) Level 2 Award in Infection Prevention (COVID-19) for Beauty Therapy and Nail Services or the VTCT (ITEC) Level 2 Award in Infection Prevention (COVID-19) for Clinical Aesthetics.

These qualifications have been specifically designed for those working in the beauty and advanced aesthetic therapy sectors. Learners will be able to develop knowledge on the importance of social responsibility, the causes, transmission and effects of COVID-19, and the methods used to control transmission such as correct hand hygiene and the use of Personal Protective Equipment (PPE).

These qualifications will enable beauty professionals to gain an understanding of the safe working practices required in the beauty and advanced aesthetic therapy sectors to protect themselves and their clients from COVID-19 and other respiratory infections.

Assessment requirements

Learners must complete all assessment requirements related to this unit:

1. Case studies
2. Assignment
3. Practical examination

1. Case studies

The knowledge and skills of all learning outcomes in the unit are assessed in the case studies. Learners must produce a treatment portfolio which is required to be completed under the supervision of a lecturer who must monitor the quality of the treatments performed throughout the learner's training, to ensure that they meet the given criteria. All case studies must be completed and marked prior to the learner completing the practical and theoretical examinations.

Learners must complete a minimum of 6 case studies on at least 3 different clients demonstrating all application techniques in the range to meet all treatment objectives across the range which may be combined.

Each case study needs to include a full medical history of the client, advanced skin assessment, before, during and after visual media images and a full description of the conditions/characteristics to be treated. A detailed description of the treatment protocols followed; method selected including rationale of choice, topical anaesthetics/numbing agents if appropriate, treatment map, equipment, devices and accessories used, needles/treatment head/cartridge, configurations and batch numbers where appropriate, speed, settings, angle, pressure, treatment products/activating solutions/serums and batch numbers, techniques, the duration of treatment observed client response and client feedback, full aftercare advice including healing products recommended must also be provided. Each case study must also include an evaluation of the treatment and its outcomes including recommendations of ongoing treatments and associated time frames.

Range to be included in case studies:

- Met the needs of a variety of clients:
 - New
 - Existing
- Carried out all consultation techniques:
 - Questioning – verbal
 - Listening – non-verbal
 - Visual – non-verbal
 - Visual aids – illustrative images and diagrams
 - Manual
 - Written
 - Pre, and post-treatment media images
- Carried out skin sensitivity tests:
 - Patch test where applicable
 - Tactile test
 - Thermal test

- Carried out advanced skin assessment:
 - Skin classification
 - Fitzpatrick scale
 - Glogau photo-damage
 - Lancer scale
 - Skin characteristics
 - Skin type; oily/dry/combination
 - Skin condition; mature/dehydrated/sensitive
 - Primary and secondary concerns
 - Sensitivity
 - Skin density
 - Pigmentation irregularities
 - Intrinsic and extrinsic factors
- Met all treatment objectives:
 - Skin rejuvenation
 - Improve skin condition
 - Improve skin texture
 - Even skin tone
 - Anti-ageing
 - Fat reduction
 - Improve contour
 - Improve hair quality
 - Reduction of hair loss
- Treatment areas:
 - Face
 - Neck
 - Décolleté
 - Body
 - Hands
 - Head/scalp
- Considered all factors of skin characteristics:
 - Fitzpatrick scale (1-6)
 - Glogau photo-damage
 - Lancer Scale
 - Level of sensitivity
 - Thickness of skin
 - Epidermal thickness
 - Healing capacity
- Taken all courses of necessary action:
 - Explaining why treatment cannot be carried out
 - Encouraging the client to seek medical advice if applicable
 - Modification of treatment

- Treatment products/activating solutions:
 - Hyaluronic acid
 - Vitamins
 - Minerals
 - Peptides/amino acids
 - Single component applications
 - Cocktails
- Types of equipment and techniques:
 - Electroporation – no needles
 - Electroporation with needles
 - Meso-needling – skin roller/micro needling
 - Skin injection therapy (SIT)
 - Mesotherapy gun
 - Injection techniques – picotage, nappage, point-by-point, linear threading, crosslinking/crosshatching
- Given all advice and recommendations:
 - Suitable post care products and their uses
 - Pre-treatment skincare products and lifestyle recommendations
 - Avoidance of activities which may cause adverse reactions or contra-actions
 - Modifications to lifestyle patterns
 - Recovery and skin healing process including the effects on treatment product over time
 - Post-treatment contra-actions and how to deal with them
 - Frequency and benefits of future treatments and associated time frames
 - Treatments which could be given in conjunction before mesotherapy techniques
 - Present and future products and treatments recommended
 - Use of SPF products
 - Issuing of oral and written post-care advice
 - Recording before and after media images

2. Assignment

Learners must complete a Short Answer Response (SAR) assignment for this unit. The assignment is mapped to the relevant assessment criteria stated below.

The SAR will test knowledge and understanding from learning outcomes (LO) 1, 2 and 3.

Learning Outcome	Assessment Criteria
LO1 Critically analyse the safety considerations when providing mesotherapy techniques	1.1 Suppliers' and manufacturers' instructions for safe use
	1.2 Contra-indications that would prevent or restrict treatment
	1.3 Contra-indications requiring medical referral and referral processes
	1.4 When to consult with other aesthetic/medical professionals
	1.5 Hazards and risks

Learning Outcome	Assessment Criteria
LO2 Critically analyse accepted protocols and guidelines for providing mesotherapy techniques	2.1 Pain threshold, sensitivity variations and testing

Learning Outcome	Assessment Criteria
LO3 Critically analyse the uses, limitations, benefits and effects of mesotherapy products	3.1 Types and purpose of mesotherapy equipment and products
	3.2 Uses, limitations, benefits and effects of mesotherapy techniques

3. Practical examination

The content of LO4 and LO5 are assessed by a practical examination.

The practical examination will be conducted by an external examiner through direct observation at the centre.

In preparation for the practical examination, centres are advised to ensure learners have carried out a series of formatively assessed case studies, comprising of complete practical treatments, in accordance with the practical assessment criteria for the qualification.

It is essential centres use the Practical Assessment Criteria document in order to prepare learners for the Practical Examination. This can be found on the VTCT and ITEC websites.

The Practical Examination must take place under controlled conditions, in a realistic working environment on a real client and in a commercially acceptable time frame for the practical treatment being examined.

Document History

Version	Issue Date	Changes	Role
1	20/7/23	First published	Development and Regulation Manager