

Chemical Peels

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About

Chemical peeling is a very popular treatment for skin rejuvenation.

Chemical peels induce injury to the epidermis and the superficial dermis resulting in elastotic, aged and photo damaged skin being removed and replaced with a new collagen-rich layer.

Skin peeling dates back to ancient Egypt where Egyptian royalty used to bathe in sour milk to brighten their complexion. Over the years the use of chemical peels has been well established as a potent corrective and anti-ageing weapon against sun damaged skin, age-related skin changes such as fine lines and wrinkles, freckles, skin blemishes, pigmentation disorders, uneven skin tone, dilated pores, greasy and acne-prone skin, and acne scarring.

Various chemicals have been used as peeling agents. Some of the most commonly used ones include:

- **Resorcinol** (antiseptic and astringent)
- **Phenol** (also called carbolic acid, very deep penetration into the skin)
- **Trichloroacetic acid** (is used as an intermediate to deep peeling agent in concentrations ranging from 20-70%)
- **Alpha-hydroxy acids (AHA)** such as
 - **Glycolic acid** (derived from sugar cane)
 - **Citric acid** (citrus-derived),

- **Lactic acid** (found naturally in the body and fermented milk)
- **Malic acid** (derived from apples)
- **Tartaric acid** (derived from grapes), etc
- **Beta-hydroxy acid (BHA)** such as
 - **Salicylic acid** (closely related to aspirin, which is acetyl-salicylic acid)

Hydroxy acids are naturally occurring organic carboxylic acids classified alpha or beta according to their molecular structure. Both alpha- and beta- hydroxy acids encourage sloughing of old epithelium and epithelial renewal by acting on the intercellular linkages (desmosomes) between keratinocytes.

Dr S. Foutsizoglou will offer you a complete *Skin Analysis* which will be used as a guidance for the formulation of your individualised treatment. To learn more about your skin type please download the *Skin Analysis Chart* from our website.

The choice of the appropriate peel depends on the specific indications, the depth of the desired peeling, your skin phototype and your expectations. Multiple compounds may also be used depending on the targeted problem. An example of a combined peel is *Jessner's peel* (i.e. 14% salicylic acid, lactic acid, and resorcinol in an ethanol base).

There is a multitude of peeling agents on the market with some of them either being associated with significant side effects and complications or

not being effective enough to deliver a satisfactory result. Please also remember that the right chemical peel for the right indications should be used for optimal results.

Experienced doctors such as plastic surgeons or dermatologists are the most likely to give you the range of options available and help you form an individualised treatment course for a skin improvement you can be really happy with. In addition, only doctors are allowed to use high concentration peels which are usually very effective for severe problems such as significant photo damage or acne scarring.

Dr Sotirios Foutsizoglou's vast experience assures the right choice of the chemical peel or combination of peels that will target the root of your skin problem giving you the healthy skin and glamour you have always dreamt of.

In addition to AHA's and BHA's some of the highly effective chemical peels our **SFMedica** doctors use include:

- **SkinMedica VITALIZE Peel** – A unique blend of Alpha- and Beta- Hydroxy Acids, Resorcinol and Retinoic Acid.
- **SkinMedica Illuminize Peel** – non invasive, indicated for mild skin problems.
- **SkinMedica Rejuvenize Peel** – Indicated for *moderate to severe* skin conditions (e.g. acne, acne scarring, melasma, sun damage, etc). For more information on SkinMedica peels please download the relevant PDF from our website.
- **Neostrata AHA's**
- **Mesoestetic Combined Peels**
- **Innovation Concept Peel** (a combination of *Hydroquinone, Kojic acid, Salicylic acid, Phytonadione* and *Retinoic acid*) – ideal for hyperpigmentation and photodamaged skin
- **SkinTech TCA Peels**

- **Derma Peel** for those who can afford Zero downtime
- **Medik8 Peel** and **Medik8 Eye Peel** for the delicate under-eye, neck and décolleté areas
- **Obagi Blue Peel**
- **DermaCeutic Professional Peels**
- **INNO-PEEL** – A range of chemical peels producing a controlled chemical dermabrasion at epidermal level.
- **Agera Rx**
- **PRIORI FORTE Professional Skin Renewal System** – Lactic Acid peels designed to treat all skin types. They are particularly indicated for premature ageing, rejuvenation and adult acne.

Mechanism of skin peeling

Chemical peeling is an accelerated form of exfoliation created by the chemical agent. Light peeling agents induce a faster sloughing of the cell in the epidermis (i.e. superficial layer of the skin), whereas deeper peeling agents create inflammation in the dermis (i.e. middle skin layer). Following the controlled chemical burn to the skin, the wound healing process results in skin regeneration and new collagen formation along with deposition of glycosaminoglycans such as hyaluronic acid. Collagen remodelling is the main reason chemical peels decrease sun damage and reduce wrinkles. After healing the skin acquires an improved appearance, more even skin colour, smoother texture and a healthier glow.

Peel depth

Depth of the chemical peel describes the level of penetration and inflammation of the skin produced by the chemical agents. The depth of the peel depends on many variables, including:

- Peeling agent

- Concentration of the peeling agent
- How many coats of the agent are applied
- Technique of application
- How the skin was cleaned and degreased before the peel
- Patient skin type
- Anatomical location of the peel
- Duration of contact with the skin (particularly AHAs)

Indications

Chemical peels are indicated for the treatment and correction of a variety of skin problems including:

- Sun-damaged skin, pigmentation spots, melasma, chloasma, post inflammatory pigmentation, superficial skin blemishes, freckles, lentigines, actinic keratoses.
- Ageing skin, smoker's lines, fine surface wrinkles.
- Greasy, acne-prone skin, visible pores, blackheads and whiteheads, excess sebum, acne scarring.
- Dull complexion, dehydrated or coarse skin, rough texture.
- Scars, stretch marks, depressions or irregularities of skin surface.

Does your skin problem fall in any of the above skin conditions? If yes, contact us today to arrange a consultation with **Dr Sotirios Foutsizoglou** who will be happy to discuss the most effective treatment with you, as well as answer any questions you may have.

Chemical peeling is also an excellent rejuvenating treatment and a cosmetic potentiator and ioniser. Skin peels improve the skin's texture, stimulate

collagen growth, remove dead skin cells, correct skin pigment problems and promote healthier, fresher and more radiant skin.

Which areas can a chemical peel be applied to?

- Face
- Neck
- Back & Shoulders
- Chest and décolletage
- Back of the hands and forearms
- Scalp

However it is important to understand that non-facial areas generally do not heal as well as the face due to significantly less amount of pilosebaceous units (hair follicles and sebaceous glands). Therefore, non-facial peels are usually milder and are repeated several times to achieve the best results without complications.

All consultations for skin problems and cosmetic dermatology take place at the London Slimming & Cosmetic Centre conveniently located in central London.

Treatment Explained

Chemical peeling uses a chemical solution, usually an acid, to 'peel' away the top layers of the skin in order to improve conditions such as acne, uneven skin tone or wrinkles. The treatment consists of applying chemoexfoliants which renew epidermis and part of the dermis, thus inducing a natural skin renewal process.

Chemical peels generally take 15 to 20 minutes. The type and strength of the chemical peel along with the number of treatment sessions depend on your skin problems and will be discussed in detail during your first consultation. An example of a treatment protocol would be six successive applications with a minimum rest period of two weeks between treatments.

Other chemical peels may require a single application of the peeling agent at the clinic followed by a customized skincare protocol at home.

Immediately prior to the application of the peeling agent your skin will be cleansed with acetone and salicylic acid or isopropyl alcohol, and then the carefully chosen peel for your skin condition will be applied and left on for a specific amount of time before it is neutralised or removed. During the application of the peel you may experience a slight burning and/or stinging sensation, but this effect is usually very mild and no anaesthesia is required. The longer the peeling agent is in contact with the skin the deeper the active ingredients penetrate. However longer periods of application may be associated with more redness and post peel skin sensitivity.

Post treatment and depending on the chemical agent used a range of complimentary products may also be required for optimal results. For instance **INNOSEARCH** offers the **INNO-PEEL Post Treatment** range of products consisting of four complimentary items, specific to each one of the **INNO-PEEL professional treatments**.

Medium and deep depth chemical peels should only be performed by experienced doctors as there is a higher risk of complications and side effects.

Precautions

Sun exposure, waxing, electrolysis, depilatory creams, laser hair removal, dermabrasion, injectable fillers should be avoided for at least a week prior to the application of the peeling agent.

Exfoliating or bleaching products and Vitamin A containing formulas should also be avoided five to seven days prior to your chemical peel.

Men are advised against shaving on the day of the chemical peel treatment.

Are there any contraindications to chemical peeling?

A chemical peel is *contraindicated* if any of the following occurs:

- Allergic reactions to peeling agents
- Roaccutane use within six months
- Active cold sores on lips or face
- Wounded, sunburned or excessively sensitive skin
- Dermatitis and inflammatory rosacea
- History of recent chemotherapy or radiation
- Pregnancy or active breastfeeding
- Steroid use
- History of keloid scarring
- Skin infection

If unsure please discuss it with **Dr Sotirios Foutsizoglou** during your first consultation.

Is skin preconditioning required?

Preconditioning regimens are often used before chemical peel therapy. Your doctor will advise you which preparation and if you need to have your skin preconditioned prior to your chemical peel.

Skin preconditioning may include:

- Pretreatment with retinoids
 - Increases dermal collagen
 - May help reduce post-treatment hyperpigmentation
 - Has a rejuvenating effect
 - Increase blood flow speeding up healing process

- Retinoic acid preparations such as *Tretinoin* 0.05% or 0.025%
- Increases the permeability of the epidermis particularly to trichloroacetic acid (TCA)
- Usually 4-6 weeks prior to chemical peeling
- 4% Hydroquinone
 - Suppresses melanocyte activity
 - Helps prevent post-peel hyperpigmentation
- Pretreatment with other keratolytic agents such as *Jessner's solution* or *AHA's*
 - For deeper peeling as they enhance the depth of penetration of the peeling agent (e.g. TCA)
 - Rejuvenating effect
- Antiviral therapy for a history of herpes

Results

Depending on your skin problem and the peeling agent used, following a course of chemical peels you should expect fine line reduction, better skin hydration, even skin tone and an overall younger, firmer and healthier looking skin. This can be achieved by:

- Acceleration of epidermal exfoliation eliminating skin blemishes and superficial scarring.
- Stimulation and reorganisation of collagen and elastin fibres improving skin quality.
- Increase in fibroblast activity.
- Increase in hyaluronic acid production providing greater degree of hydration.
- Correction of sebaceous secretion

normalising skin's pH and eliminating whiteheads and blackheads.

A chemical peel can also be combined with other medical treatments such as microneedling or mesotherapy for even greater results.

Aftercare

Downtime is usually minimal with AHA's and superficial peels and you can return to your usual daily activities on the same day. However flaking, swelling, redness and sensitivity may take longer to settle with deeper chemical peels.

Following a chemical peel you must always use a broad-spectrum sunscreen with a high SPF and avoid direct sunlight for at least one week. Your skin will be more sensitive to the sun and thus more susceptible than usual to sunburn.

You may resume the regular use of retinoids, alpha hydroxy acid (AHA) products or bleaching creams **ONLY** after the peeling process is complete.

Dr S. Foutsizoglou will give you specific post peel care instructions and prescribe an individualised skincare protocol depending on your skin problems and the type of peel used.

As a general guide you can download the **SkinMedica** Post Peel Care Instructions.

For better results we recommend the post peel **SkinMedica Ablative Post-Procedure Kit** which has been specifically designed to optimize the results of the chemical peel. It is formulated to protect fragile post-procedure skin, minimize complications, and support patients' recovery

Contact us today to arrange a consultation with one of our specialist doctors who will be happy to discuss the most appropriate chemical peel for you, as well as answer any questions you may have.

Tables

The Fitzpatrick phototype scale			
Type	Phototype	Sensitivity	Characteristics
Type I	Blond or red hair, freckles, fair skin, blue eyes	Very Sensitive	Always burns easily, never tans; very fair skin tone
Type II	Blond, fair skin, blue eyes or green eyes	Very Sensitive	Usually burns easily, tans with difficulty; fair skin tone
Type III	Darker Caucasian, Mediterranean	Sensitive	Burns moderately, tans gradually; fair to medium skin tone
Type IV	Darker Mediterranean, Asian, Hispanic	Moderately Sensitive	Rarely burns, always tans well; olive skin tone
Type V	Middle Eastern, Latin, light-skinned black, Asian	Minimally Sensitive	Very rarely burns, tans very easily; dark skin tone
Type VI	Dark-skinned black	Least Sensitive	Never burns, deeply pigmented; very dark skin tone

Glogau's classification of the severity of wrinkles	
Groups	Classifications
I - Mild typically aged 28-35	<ul style="list-style-type: none"> • Little wrinkling or acne scarring • No keratoses
II - Moderate typically aged 35-50	<ul style="list-style-type: none"> • Early wrinkling; mild scarring • Sallow colour with early actinic keratoses
III - Advanced typically aged 50-65	<ul style="list-style-type: none"> • Persistent wrinkling or moderate acne scarring • Discolouring with telangiectasias and actinic keratoses
IV - Severe typically aged 60-75	<ul style="list-style-type: none"> • Wrinkling; photoaging, gravitational, and dynamic • Actinic keratoses with or without skin cancer