

PLASTIC SURGERY

Pigmentation be gone!

It's a stubborn skin affliction, but it can be cured with the right treatments.



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Skin pigmentation is among the most common skin disorders. Unfortunately, it is only preventable to a certain degree even with dutiful sun protection because many factors contribute to it, namely, genetics, exposure to UV rays, hormonal changes and of course, the natural ravages of time.

Skin hyperpigmentation conditions such as melasma (characterised by blotchy dark patches), ephelides (freckles) and post-inflammatory hyperpigmentation are conditions caused by abnormal melanin deposits. Melanin is the pigment that gives human skin, hair, and eyes their colour.

These conditions are related to different trigger factors such as sun exposure, hormonal stimulation, previous inflammation processes or exposure to certain chemicals. Many people suffer from it and there is high demand for its treatment.

Sun exposure is one of the main factors that promote hyperpigmentation, so good sun protection habits are essential. This includes wearing sunscreen



(SPF50+) daily, reapplying it every two hours and taking other precautions such as using umbrellas and wearing wide-brimmed hats when outdoors. These measures can help prevent or reduce the chances of skin hyperpigmentation.

Treating pigmentation

The ideal treatment for hyperpigmentation is to destroy the pigment without harming the cells that produce it. This is hard to achieve, but there are a few other effective methods available:

Chemical peels: Superficial or epidermal pigment can be peeled off with acidic solutions, such as alpha-hydroxy acids (AHA) and trichloroacetic acid (TCA). They are usually applied as a form of facial peel, and have proven effective in not just treating skin pigmentation, but also other forms of facial blemishes including wrinkles and scars, as well as stretch marks. Chemical peels work by exfoliating the outer layers of dead skin, which in turn reveals the new skin underneath.

A word of caution – peels must be done carefully as they can result in post-inflammatory pigmentation.

Tyrosinase inhibitors: These work by controlling the production of melanin, thus preventing the formation of



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new pigment. They can be applied either topically or ingested.

Lasers: A form of laser treatment, ablative fractional lasers work mostly on surface skin cells. Intense wavelengths of light are applied to the skin, removing the pigmentation and stimulating collagen formation. This results in new skin that is smoother and less pigmented. However, ablative laser treatments involve a lot of downtime and it may take as long as four weeks for skin to heal.

Non-ablative lasers, on the other hand, work on the mid-layer of skin (dermal collagen). Heat is delivered into the skin, stimulating collagen renewal. As this is a milder treatment, multiple sessions stretching for as long as six months for five treatments may be required before results can be seen.

Some treatments for the abovementioned methods include the Q-switched Nd: YAG lasers, carbon dioxide

or erbium: YAG resurfacing lasers and pigment lasers such as the Q-switched ruby and Alexandrite devices.

Mechanical dermabrasion and microdermabrasion: A medical procedure that sees the skin being resurfaced. It removes the top layer of damaged skin so that new skin surfaces and appears like rejuvenated skin.

However, mechanical dermabrasion can be invasive. Microdermabrasion, its less harsh counterpart, is gaining popularity due to its gentle nature.

Microcrystals, air or water are sprayed across skin, removing the outer layer of skin cells, revealing the new growth beneath. Its efficiency can be compared to that of a peel, and it is able to treat not just pigmentation, but also a host of other aesthetic issues such as scars and stretch marks.

Like most non-invasive treatment methods, a few

sessions may be needed to achieve the best results.

Intense Pulsed Light (IPL): Also known as a photofacial treatment, IPL is the delivery of intense pulses of broadband light into the dermis (which is the deeper layer) of the skin, while avoiding the epidermis (the outer layer of skin). This means that IPL treatments are non-ablative, with little or no downtime involved.

Cosmelan®: A long-term treatment, Cosmelan includes two complementary actions: removal of superficial hyperpigmentation through chemical exfoliation, and progressive elimination and control of hyperpigmentation through reversible and non-cytotoxic inhibition of the melanogenesis. As the treatment renews the skin, it also has other benefits like mild wrinkle reduction and skin tightening. 

