

# Spotted: Uneven Skin Tone

When pigmentation puts you on the spot



They are known as "sun spots", "dark spots" or "age spots", and they're a common problem seen almost everywhere you look. You've probably experienced them yourself (or you will at some point in time!), and so has your mother, your colleague, your neighbour... So what exactly is pigmentation and what can you do to avoid those ugly splotches? Dr Leo Kah Woon, Consultant Plastic and Reconstructive Surgeon at Dr Leo Aesthetic Plastic & Reconstructive Surgery, takes us through the basics of dealing with pigmentation.

## Who are at higher risk of getting pigmentation?

**Dr Leo:** Hyperpigmentation may be caused by prolonged sun exposure, inflammation or other skin injuries, including those related to acne outbreak. Generally, people with Asian, Mediterranean or African skin tones are also more prone to hyperpigmentation.

Sometimes, hyperpigmentation may also be related to underlying medical conditions such as Addison's disease, Cushing's disease or acanthosis nigricans. It is important that a patient with pigmentation disorder be evaluated by an experienced physician to exclude these conditions before embarking on any treatment.

## Why is it women have higher risk of getting pigmentation than men?

**Dr Leo:** In Singapore, a lot of women with pigmentation problems suffer from a condition known as melasma. Melasma is characterised by patchy pigmentation over the cheek, forehead and upper lip. It is caused by an overproduction of melanin. In most women, melasma is usually triggered

by the use of oral contraceptives, hormone

replacement therapy or pregnancy as oestrogen increases the skin's sensitivity to ultraviolet light. Hence, there is a higher incidence of hyperpigmentation in women as compared to men.

## What are the treatment options for pigmentation?

**Dr Leo:** Current treatment options include skin lightening creams, chemical peels, lasers (including IPL and ND:Yag laser) and oral tranexamic acid pills. Skin lightening creams usually contain various hypopigmenting agents including hydroquinone, kojic acid, tretinoin or arbutin. Chemical peels allow for more rapid exfoliation of melanin contained with the skin. Lasers or IPL (Intense Pulse Light) are also frequently used in the treatment of hyperpigmentation. They work by the principle of selective photothermolysis whereby the pigments get heated up by the laser and eventually broken down. Again, an experienced doctor is necessary for these procedures as it may lead to worsening of the melasma if not properly done.

A newer treatment over the past few years for melasma includes the use of oral tranexamic acid. Tranexamic acid was previously used by women to treat heavy menstrual flow. In recent years, there have been reports on the use of low dose tranexamic acid on melasma patients with encouraging results.

## What happens if pigmentation is left untreated?

**Dr Leo:** Melasma is a chronic problem.

If left untreated, it usually increases in severity. This may lead to social embarrassment and patients become self-conscious of their own appearance.

## What are the different treatment options for pigmentation you offer in your clinic?

**Dr Leo:** I usually treat my patients with combination therapy for best results. I typically use a low-energy Q-switched ND:Yag laser at 1,064nm for melanin pigment breakdown. This is then followed by laser at 595nm wavelength to suppress the abnormal vascular activity associated with melasma. I would also prescribe a hydroquinone based skin lightening agent in association with sunblock for my patients.

## How do Obagi Clear and Blender work?

**Dr Leo:** Obagi Clear and Blender work as both of these products contain hydroquinone. Hydroquinone is a powerful skin lightening agent as it inhibits tyrosinase, an enzyme needed in the production of melanin. Hence, it reduces the production and increases the breakdown of melanin pigment granules in the skin's pigment cells.

## How long will it take to see results?

**Dr Leo:** Usually, patients see results after four to six weeks of continuous usage. To increase the effectiveness of hydroquinone, patients should also stay out of the sun, wear protective clothing or use a sunscreen of at least SPF30+.



*Dr Leo Aesthetic Plastic & Reconstructive Surgery Pte Ltd is located in Mount Elizabeth Medical Centre. For more information, call 6733 3895 or email [www.drleoplasticsurgery.com](http://www.drleoplasticsurgery.com).*