

MELASMA

What are the aims of this leaflet?

This leaflet has been written to help you understand more about melasma. It tells you what it is, what causes it, what can be done about it and where you can find out more about it.

What is melasma?

Melasma, also called 'chloasma', is a common skin condition of adults in which light to dark brown or greyish pigmentation develops, mainly on the face. The name comes from *melas*, the Greek word for black. Although it can affect both genders and any race, it is more common in women and people with darker skin-types who live in sunny climates. Melasma usually becomes more noticeable in the summer and improves during the winter months. It is not an infection, it is not contagious and it is not due to an allergy. Also, it is not cancerous and will not change into skin cancer.

What causes melasma?

The exact cause is not known, but several factors contribute. These include pregnancy, hormonal drugs such as the contraceptive pill, and very occasionally medical conditions affecting hormone levels. Some cosmetics, especially those containing perfume, can bring on melasma. There is research to suggest that it can be triggered by stress. Sunshine and the use of sun-beds usually worsen any tendency to melasma.

Is melasma hereditary?

Melasma can run in families, suggesting an inherited tendency.

What does melasma look like?

Melasma is simply darker-than-normal skin affecting the cheeks, forehead, upper lip, nose and chin, usually in a symmetrical manner. It may be limited to the cheeks and nose or just occur overlying the jaw. The neck and, rarely, the forearms can also be affected. Areas of melasma are not raised.

What are the symptoms of melasma?

It is the cosmetic aspect of melasma that affected people tend to find upsetting. The affected skin is not itchy or sore.

How is melasma diagnosed?

Melasma is usually easily recognised by the characteristics of the pigmentation and its distribution on the face. Occasionally, your dermatologist may suggest that a small sample

of skin (numbed by local anaesthetic) is removed for examination under the microscope (a biopsy) in order to exclude other diagnoses.

Can melasma be cured?

No, at present there is no cure for melasma, but there are several treatment options which may improve the appearance. Superficial pigmentation is easier to treat than deep pigmentation. If melasma occurs during pregnancy, it may resolve on its own within a few months after delivery and treatment may not be necessary.

How can melasma be treated?

Melasma treatments fall into the following categories, which can be used together:

- Avoiding known trigger factors, such as the oral contraceptive pill or perfumed cosmetics.
- Adopting appropriate sun avoidance measures and using sun-blocking creams.
- Skin-lightening agents.
- Chemical peels, dermabrasion and laser treatment.
- Cosmetic camouflage.

Sun protection

Skin affected by melasma darkens more than the surrounding skin with exposure to sunlight, so sun-avoidance and sun-protection are important. Broad-spectrum sunscreens, with a high protection SPF (SPF 30 or more) and a high ultraviolet A (UVA) star-rating (4 or 5 UVA stars), should be applied daily throughout the year, and broad-brimmed hats are recommended. In particular, avoidance and protection measures should be employed during the period of most intense sunshine. Sun-beds should not be used.

Skin lightening creams

Certain chemicals can reduce the activity of pigment-forming cells in the skin, and of these, hydroquinone is the most commonly used. Hydroquinone creams may cause irritation, and care must be taken to ensure that they are not used for too long in case they cause excessive skin lightening. Hydroquinone can, very occasionally, cause increased darkening of the skin by a process called *ochronosis*, especially in very dark-skinned people. Hydroquinone creams can now only be prescribed by doctors.

Azelaic acid and retinoid creams are mainly marketed to treat acne, but can also help melasma.

All these creams can irritate the skin and are therefore sometimes combined with steroid creams. Some skin bleaching creams contain a mixture of these ingredients.

Chemical Peels, Micro-Dermabrasion and Laser-treatment

Chemical peels can improve melasma by removing the cells of the epidermis which contain the excess pigment. These techniques should be undertaken by an experienced person as they have the potential to worsen the pigmentation, to make the skin too light or to cause scarring.

Some types of laser also remove the outer layer of skin, whereas others specifically target the pigment-producing cells. At present, the success of laser treatment is variable, and the possible side effects can be similar to peels and micro-dermabrasion.

These treatments are usually not available as NHS procedures.

Cosmetic camouflage

Cosmetic camouflage is a special make-up, which is matched to the skin colour of the individual and which will not easily come off. Your general practitioner or dermatologist may refer you to somebody with beautician experience to assist you in finding the right product and to teach you how to apply it. This service is provided by Changing Faces.

Self care (What can I do?)

The most important thing you can do if you have melasma is to protect your skin from undue sunlight exposure. This involves using sunscreens which protect against both UVA and UVB light, with a sun protection factor of at least 30, wearing broad-brimmed hats, and avoiding direct exposure to sunlight (see the 'top sun safety tips' below for more information).

If your melasma improves with treatment, in order for the improvement to be maintained you should continue to protect your skin from the sun.

Top sun safety tips

- Protect your skin with clothing, and don't forget to wear a hat that protects your face, neck and ears, and a pair of UV protective sunglasses.
- Spend time in the shade between 11am and 3pm when it's sunny. Step out of the sun before your skin has a chance to redden or burn. Keep babies and young children out of direct sunlight.
- When choosing a sunscreen look for a high protection SPF (SPF 30 or more) to protect against UVB, and the UVA circle logo and/or 4 or 5 UVA stars to protect against UVA. Apply plenty of sunscreen 15 to 30 minutes before going out in the sun, and reapply every two hours and straight after swimming and towel-drying.
- Keep babies and young children out of direct sunlight.
- The British Association of Dermatologists recommends that you tell your doctor about any changes to a mole or patch of skin. If your GP is concerned about your skin, make sure you see a Consultant Dermatologist – an expert in diagnosing skin cancer. Your doctor can refer you for free through the NHS.
- Sunscreens should not be used as an alternative to clothing and shade, rather they offer additional protection. No sunscreen will provide 100% protection.
- It may be worth taking Vitamin D supplement tablets (available from health food stores) as strictly avoiding sunlight can reduce Vitamin D levels.

Vitamin D advice

The evidence relating to the health effects of serum Vitamin D levels, sunlight exposure and Vitamin D intake remains inconclusive. Avoiding all sunlight exposure if you suffer from light sensitivity, or to reduce the risk of melanoma and other skin

cancers, may be associated with Vitamin D deficiency.

Individuals avoiding all sun exposure should consider having their serum Vitamin D measured. If levels are reduced or deficient they may wish to consider taking supplementary vitamin D3, 10-25 micrograms per day, and increasing their intake of foods high in Vitamin D such as oily fish, eggs, meat, fortified margarines and cereals. Vitamin D3 supplements are widely available from health food shops.

Where can I get more information about melasma?

Web links to detailed leaflets:

www.dermnetnz.org/colour/melasma.html

www.emedicine.com/derm/topic260.htm

Links to patient support groups:

British Association of Skin Camouflage (NHS and private practice)

Tel: 01254 703 107

Email: info@skin-camouflage.net

Web: www.skin-camouflage.net

Changing Faces

Tel: 0300 012 0276 (for the Skin Camouflage Service)

Email: skincam@changingfaces.org.uk

Web: www.changingfaces.org.uk

Skin Camouflage Network (NHS and private practice)

Helpline: 0785 1073795

Email: enquiries@skincamouflagenetwork.org.uk

Web: www.skincamouflagenetwork.org.uk

For details of source materials used please contact the Clinical Standards Unit (clinicalstandards@bad.org.uk).

This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists: its contents, however, may occasionally differ from the advice given to you by your doctor.