

Laser treatment for pigmented marks

Information and advice for patients

Skin Laser Centre - Dermatology

What are pigmented marks?

Pigmented marks are brown marks or lesions on the skin, which are sometimes present at birth. They are caused by an excess of melanin, the skin's natural tanning pigment.

There are different types of pigmented marks:

- **Café-au-lait birthmarks:** These are flat, light brown, coffee-coloured marks that are usually present at birth or develop soon afterwards.
- **Naevus spilus:** These are similar to café-au-lait marks but have freckles within them.
- **Becker's naevus:** This is a brown patch that usually appears around puberty. They are more common in boys and usually appear on the shoulder and can spread across the upper back and chest. Most will develop coarse dark hairs (hypertrichosis).
- **Naevus of Ota:** This is a pigmented mark on the face which appears blue, black or grey in colour. They are more common in Asian populations and women. Naevus of Ota are usually located on one side of the face and may cause the eye to become discoloured.

Pigmented marks can be treated with the Q-switched Nd:yag laser.

What are the benefits of laser treatment for pigmented marks?

The benefit of laser treatment for pigmented marks is that it can lighten the appearance of the mark over time. This can help some people to feel less self-conscious about the mark and more confident.

Most people need 10 – 16 treatments to achieve the best results.

How does the treatment work?

The laser energy is delivered to the area in a series of brief pulses which, over a series of treatments, causes the pigment in the skin to break down and lighten.

What are the risks of laser treatment?

Changes in skin pigment (colour)

- Darkening of the skin (hyper-pigmentation) in the area that has been treated is the most common risk of laser treatment and is more likely to occur in people who tan easily or who have darker skin. Hyper-pigmentation will usually resolve itself in the next 3 – 6 months.
- Whitening of the skin (hypo-pigmentation) can also occur and in most cases this will resolve by itself over a few weeks, but in some rare cases it can be permanent

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Scarring and infection

There is a risk you could develop a scar in the area that has been treated. This is uncommon, and although we do not know how many people it occurs in, when the same laser is used to treat another condition. 3 out of 100 patients develop a scar. There is also a small risk that you could develop an infection in the area. To reduce the risk of getting an infection or scar it is important that you follow the aftercare advice on page 5, and do not aggravate the treated area by picking, scratching or rubbing it.

Not achieving the desired result

In some patients the mark may not respond to laser treatment, or may respond and then return to its original appearance.

Are there any alternatives to this treatment?

In some cases surgery may be an alternative treatment, but not all. The surgery involves taking some skin from another part of the body, and moving it to the affected area, however this would leave a noticeable scar in both areas.

What will the treatment feel like?

Most people feel some pain during the treatment, which they describe as being like 'a warm elastic band hitting your skin'. If you are concerned about this you can take paracetamol before your appointment. You can also talk to the consultant about using an anaesthetic cream (LMX or Ametop) to numb the area. The nurse can apply before you have your treatment.

Preparing for laser treatment

- A test treatment will be carried out on your skin to check how it reacts. If the results are satisfactory and there are no concerns then you can be seen after 4 weeks for the treatment, if NHS funding has been approved.
- Laser treatment cannot be performed if you have a suntan. If you have a tan this must be allowed to fade before having the treatment.
- Please purchase Aloe Vera gel, vaseline and sun block (SPF 30 at least) as you will need to use these after your treatment to protect your skin and help it heal.
- Remove all make-up and moisturising creams before the treatment.
- If you have arranged with your consultant that you will use anaesthetic cream you will need to come to the hospital 1 hour before your appointment to have this applied and allow it time to work.

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During the treatment

The treatment will be carried out by a consultant or specialist nurse. How long each treatment takes depends on the size and type of pigmented mark being treated. This is what happens:

1. If you have had local anaesthetic cream applied this will be removed from the surface of your skin.
2. You will be asked to wear a pair of goggles to protect your eyes from the laser.
3. The consultant/nurse will set the laser to the relevant settings.
4. The laser will be directed to the area being treated using a hand-held device and applied to your skin. You will feel the laser hitting your skin in short pulses.
5. When it is safe to do so, the consultant/nurse will ask you to take your goggles off.
6. Aloe vera gel is then applied to the treated area to cool and soothe it.

After the treatment

Immediately after your treatment the treated area can become white; this will slowly disappear within a few days. You may also develop a bruise or some crusting in the treated area which can last for up to a week.

Going home

You will be able to go home straight after the treatment and go back to your normal activities. When you are at home please follow the advice detailed on page 6.

Caring for the treated area

- Avoid exfoliating and using any soaps or perfumed products on the treated area until it has fully healed.
- Avoid swimming and using a sauna or steam room until the area has fully healed.
- If your skin feels dry or tight apply Aloe Vera gel to it to help calm and soothe the area.
- Avoid exposure to the sun and ultraviolet light and apply protection with an SPF of 30 or above every day for 6 months after treatment.
- If you develop some crusting/a scab in the treated area do not pick at this as this could lead to infection or cause a scar. Keep the area moist using vaseline, until the crusting has come away naturally.

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Symptoms to report

Check your skin regularly for any problems with healing or skin pigmentation changes and contact us if you are concerned.

Contact details

If you have any questions or concerns about this treatment please contact:

Skin Laser Centre

Monday – Friday 8.30am – 3.45pm

0121 507 6639

swbh.dermlaser@nhs.net

Further information

For more information about our hospitals and services please see our website www.swbh.nhs.uk, follow us on Twitter @SWBHnhs and like us on Facebook www.facebook.com/SWBHnhs.

Sources used for the information in this leaflet

S.W. Lanigan, 'Lasers in dermatology', 2000

K. Nouri, 'Lasers in dermatology and medicine', 2011

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