MELANOCYTIC NAEVI (pigmented moles)

What are the aims of this leaflet?

This leaflet has been written to help you understand more about melanocytic naevi (pigmented moles). It tells you what they are, what causes them, what can be done about them, and where you can find out more about them.

What are melanocytic naevi?

Melanocytic naevi are pigmented moles. The word ‘melanocytic’ means that they are made up of the cells (melanocytes) which produce the dark pigment (melanin) that gives the skin its colour. Melanocytes clustered together form naevi. These types of moles vary in colour in different skin tones and they are easier to see on pink skins.

Some moles are present at birth or appear within first two years of life are known as *congenital* melanocytic naevi. Most develop during childhood and early adult life and are consequently called *acquired* melanocytic naevi. The number of moles increases up to the age of 30-40. Thereafter, the numbers of naevi tend to decrease. New moles appearing in adulthood need to be monitored and checked if growing or changing. Moles can be found anywhere on the skin, including on the hands and feet, genitals, eyes and scalp.

What causes melanocytic naevi?

A tendency to have multiple melanocytic naevi runs in some families.
Sunburn or excessive sun exposure contribute to new moles formation and people with fair skin are more at risk.

What are the symptoms of melanocytic naevi?

Usually there are no symptoms as such. Raised moles may catch on things. Moles may become sore and inflamed after trauma.

What do melanocytic naevi look like?

Those that are present at birth *(congenital melanocytic naevi)* can be small (less than 1.5cm in diameter), medium (1.5- 20cm) and large or giant (over 20 cm in diameter). Multiple giant congenital naevi have greater risk of developing melanoma.

There are three main types of acquired melanocytic naevi:

- *Junctional melanocytic naevi* are flat, and usually circular. Their colour is usually even, and ranges from mid to dark brown.

- *Compound melanocytic naevi* are raised brown bumps, most of which are hairy. Some have a slightly warty surface.
- *Intradermal melanocytic naevi* are raised, often hairy, bumps, similar to compound naevi, but paler coloured (often skin-coloured).

In childhood, most moles are of the junctional type (flat and usually circular). Later in life some become raised and hairier, and moles on the face often become pale over time.

There are several other, less common, types of mole. These include:

- *Blue naevus* - a harmless mole with a dark blue colour.
- *Halo naevus* - a mole surrounded by a pale ring (compared to the skin) which may gradually go away by itself.
- D*ysplastic or atypical naevi* - these are usually multiple, with irregular pigmentation and shape, and run in some families. They have a greater tendency than most moles to change into a melanoma, which is a skin cancer.

How will melanocytic naevi be diagnosed?

Most moles can be recognised easily by their appearance. A dermatologist may use an instrument called a dermatoscope to examine a mole closely. That device magnifies a mole (up to 20 times) and helps to examine it in more detail. It is a painless procedure. If there is any concern over the diagnosis your doctor will arrange for the mole to be removed and checked in the laboratory. It may occasionally be difficult to diagnose a mole from a seborrhoeic keratosis (a harmless dark warty mark that is common in older people) especially if it is inflamed or traumatised.

What is the risk of melanoma skin cancer with melanocytic naevi?

There is some risk of melanoma growing from an individual mole. The risk is higher for those with lots of moles (more than 20), pale skin and red hair. However, there is a strong link between excessive or recurrent sun exposure and developing a melanoma from a normal looking skin.

Can melanocytic naevi be cured?

Yes. They can be removed surgically, if necessary, but most are best left alone. There is a risk of developing a scar or a skin graft may be required for large moles. It is not recommended to have a mole removed with laser as it is not possible to have a sample for histology.

How can melanocytic naevi be treated?

There are three main reasons for removing moles:

1. If there is doubt about the diagnosis, then the mole needs to be cut out and examined under the microscope.
2. If the mole is traumatised on regular basis.
3. Cosmetic reasons (not available on the NHS).

Self-care (What can I do?)

If you have a large number of moles:

Skin should be examined monthly for moles that are growing, or changing:

- in size (getting bigger),
- shape (becoming asymmetrical with an irregular ragged edge) or
- colour (an uneven colour with different shades of black, brown or pink).

Also, if it has tendency to bleed, ooze or scab or if a mole is very different from the other moles on the skin.

If you have a concern about a mole or moles, you should see your GP as soon as possible.

Ask a family member or a friend to examine your back and taking a photograph is helpful to monitor any change to a mole.

Protect yourself and children from too much sun exposure. For example, be careful to avoid sunbathing and burning, cover yourself up and use sun protection creams of SPF 50 or above (see the 'top sun safety tips' below for more information). Do not use sunbeds.

Top sun safety tips

Sun protection is recommended for all people. It is advisable to protect the skin from further sun damage.

- Protect your skin with clothing. Ensure that you wear a hat that protects your face, neck and ears, and a pair of UV protective sunglasses.
- Make use of shade between 11 am and 3 pm when it's sunny.
- It is important to avoid sunburn, which is a sign of damage to your skin and increases your risk of developing a skin cancer in the future. However, even a tan is a sign of skin damage and should be avoided.
- Use a 'high protection' sunscreen of at least SPF 30 which also has high UVA protection. Apply sunscreen generously 15 to 30 minutes before going out in the sun and make sure you reapply frequently when in the sun.
- 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, you should be referred to see a consultant dermatologist or a member of their team at no cost to yourself through the NHS.
- No sunscreen can offer you 100% protection. They should be used to provide additional protection from the sun, not as an alternative to clothing and shade.
- Routine sun protection is rarely necessary in the UK for people of colour, particularly those with black or dark brown skin tones. However, there are important exceptions to this; for example, sun protection is important if you have a skin condition, such as photosensitivity, vitiligo or lupus, or if you have a high risk of skin cancer, especially if you are taking immunosuppressive treatments (including organ transplant recipients) or if you are genetically pre-disposed to skin cancer. Outside of the UK in places with more extreme climates, you may need to follow our standard sun protection advice.
- It may be worth taking vitamin D supplement tablets (available from health food stores) as strictly avoiding sunlight can reduce your vitamin D levels.

Melanocytic naevi and pregnancy

- Generally, pregnancy does not affect the appearance of moles. Some studies have shown that moles on the chest and abdomen may appear larger due to stretching of the skin, but they usually return to their normal size after childbirth.
- If you think a mole has changed during pregnancy, it is important to see your GP for an examination.

Vitamin D advice

The evidence relating to the health effects of serum vitamin D levels, exposure to sunlight and vitamin D intake, is inconclusive. People who are avoiding (or need to avoid) sun exposure may be at risk of vitamin D deficiency and should consider having their serum vitamin D levels checked. If the levels are low, they may consider:

- taking vitamin D supplements of 10-25 micrograms per day
- increasing intake of food rich in vitamin D such as oily fish, eggs, meat, fortified margarine and cereals.

Where can I get more information about melanocytic naevi?

Web links to detailed leaflets:

www.skinhealthinfo.org.uk/symptoms-treatments/skin-cancer/

www.dermnetnz.org/lesions/naevi.html

www.nhs.uk/Tools/Pages/Mole-slideshow.aspx

www.cancerresearchuk.org/health-professional/early-diagnosis-activities/be-clear-on-cancer/skin-cancer-campaign

If you would like more information, please see our patient information leaflets on melanoma stage 1A and 1B (early stages of skin cancer).

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: individual patient circumstances may differ, which might alter both the advice and course of therapy given to you by your doctor.

This leaflet has been assessed for readability by the British Association of Dermatologists' Patient Information Lay Review Panel

BRITISH ASSOCIATION OF DERMATOLOGISTS
PATIENT INFORMATION LEAFLET
PRODUCED AUGUST 2005
UPDATED MAY 2010, OCTOBER 2013, SEPTEMBER 2017, APRIL 2021
NEXT REVIEW DATE APRIL 2024