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. This type 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 increase up to the age of 30-40. Thereafter, the number 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 1.5 cm in diameter), medium (1.5–20 cm) 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 more pale coloured (often skin-coloured).

In childhood, most moles are of the junctional type (flat and usually circular). Later in life some become raised and more hairy, 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.
- **Dysplastic 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. 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 graft may be required for large moles excision. 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

• Protect your skin with adequate clothing, wear a hat that protects your face, neck and ears, and a pair of UV protective sunglasses. Choose sun protective clothing (with permanently sun-protective fabric, widely available for adults and children) if you have fair skin or many moles.
• 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.
• When choosing a sunscreen look for a high protection SPF (current recommendations are SPR 50 or 50+) 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 you are advised to see a Consultant Dermatologist – an expert in diagnosing skin cancer. Your doctor can refer you for free through the NHS.
• Sunscreens are not an alternative to clothing and shade, rather they offer additional protection. No sunscreen will provide 100% protection.

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 melanocytic naevi?
Web links to detailed leaflets:

www.dermnetnz.org/lesions/naevi.html
http://www.nhs.uk/Tools/Pages/Mole-slideshow.aspx

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

If you would like more information, please see the Patient Information Leaflet on Melanoma Stage 1 (early skin cancer).

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: 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.