

## MELANOCYTTIC NAEVI

### What are the aims of this leaflet?

This leaflet has been written to help you understand more about melanocytic naevi. 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?

The lay term for a melanocytic naevus is a “mole”. 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. In other words, moles are benign (harmless) groups of melanocytes.

Some moles (*congenital melanocytic naevi*) are present at birth. Most develop during childhood and early adult life (*acquired melanocytic naevi*). Almost everyone has moles: many people have between 30 and 50. Many go away in later adult life. Moles can be found anywhere on the skin, including on the hands and feet, genitals, eyes and scalp.

### What causes melanocytic naevi?

The number of moles an individual develops is determined mainly by their inheritance. Another factor is too much sun exposure in childhood. Moles are most common in people with fair skin, especially those who have frequently been sunburnt.

### Are melanocytic naevi hereditary?

A tendency to have many ordinary melanocytic naevi runs in some families. ‘Dysplastic naevi’ (see below), in particular, tend to run in families.

### What are the symptoms of melanocytic naevi?

Usually there are none. Some people do not like the appearance of their moles. Raised moles may catch on things. Moles may become sore and inflamed after hairs have been removed.

### What do melanocytic naevi look like?

Those that are present at birth (*congenital melanocytic naevi*) are seldom less than 1 cm in diameter but can be much larger. They grow in proportion with you as you grow. They are dark and tend to become more raised and hairy with age.

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.

In childhood, most moles are of the junctional type. 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 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. If there is any concern over the diagnosis, particularly over the possibility of a melanoma (see below), 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).

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

There is very little risk of melanoma growing from an individual mole, except for the very largest congenital melanocytic naevi. However, people with the largest numbers of moles, especially atypical or dysplastic moles, are at higher risk of developing melanoma.

### **Can melanocytic naevi be cured?**

Yes. They can be removed surgically if necessary, but most are best left alone.

### **How can melanocytic naevi be treated?**

There are three main reasons for removing moles:

1. The most important reason is doubt about the diagnosis. The mole then has to be checked under the microscope. The main worry is usually whether or not the mole is a melanoma. In brief, suspicious indications include changes 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). Suggestive symptoms include a tendency to bleed, ooze or crust, or if a mole is very different from the other moles on the skin. If you would like more information, please see the Patient Information Leaflet on Melanoma Stage 1.
2. The mole has become a *nuisance* by catching on clothing or being cut while shaving.
3. Cosmetic reasons (not usually available on the NHS).

If there is any doubt about the diagnosis, the mole should be cut out completely under a local anaesthetic, with a margin of normal skin around it. Other techniques can be used for moles being removed because of their cosmetic appearance or if they have become a nuisance.

### **Self care (What can I do?)**

If you have a large number of moles:

- You should examine your skin monthly for moles that are growing, or changing in the ways described above. If you find any worrying changes, or a mole that is clearly different from the rest, it is advised to contact your doctor immediately. It is normal for moles to appear up until age 30-40; a new mole after this age should be regarded with more suspicion.
- You must also protect yourself from too much sun exposure. This does not mean that you cannot ever go on a sunny holiday again; it just means that you need to be careful to avoid sunbathing and burning. You should cover yourself up and use sun protection creams of SPF 30 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, and do not forget to 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 (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 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 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 melanocytic naevi?

*Web links to detailed leaflets:*

[www.dermnetnz.org/lesions/naevi.html](http://www.dermnetnz.org/lesions/naevi.html)

