



## **LENTIGO MALIGNA**

### **What are the aims of this leaflet?**

This leaflet has been written to help you understand more about lentigo maligna and melanoma in situ. It will tell you what it is, what causes it, what can be done about it, and where you can find out more information.

### **What is lentigo maligna?**

Lentigo maligna is one type of the earliest stage of a skin cancer called melanoma.

The word 'melanoma' comes from the Greek word 'melas', meaning black. Melanin is the dark pigment that gives the skin its natural colour. Melanin is made in the skin by pigment cells called melanocytes. After our skin is exposed to sunlight, the melanocytes make more melanin, and so the skin becomes darker.

Melanocytes can grow together in harmless groups or clusters, which are known as moles. Most people have between 10 and 50 moles and often they are darker than the surrounding skin.

Melanomas can arise in or near to a mole, but can also appear on skin that looks quite normal. They develop when the skin pigment cells (melanocytes) become cancerous and multiply in an uncontrolled way. They can then invade the skin around them and may also spread to other areas such as the lymph nodes, liver and lungs.

Lentigo maligna is a type of melanoma called 'in situ' melanoma. 'In situ' means that the cancer cells have not had the opportunity to spread anywhere else in the body. There are cancer cells in the top layer of the skin (the epidermis) but they are all contained in the area in which they began to develop. They have not started to spread or grow ('invade') into deeper layers of the skin. This is why some doctors call in situ cancers 'pre-cancer'.

It is a slow growing condition that appears in skin that has had a lot of sun exposure, usually the face. Because it grows slowly it can take years to develop.

Lentigo maligna can be cured with surgery. However if not removed completely with appropriate surgery, it can develop into an invasive melanoma. This is why it is important to have them removed with a rim of normal skin (an adequate surgical margin) and to know about preventative measures you can take which will lower your risk of these conditions occurring again in the future.

### **What causes lentigo maligna?**

The most important cause is exposure to too much ultraviolet light in sunlight. It is especially common in white-skinned people who live in or frequently visit sunny countries. The use of artificial sources of ultraviolet light, such as sun beds, also raises the risk of getting a melanoma. Older people are most prone to develop lentigo maligna, especially those with many benign brown marks (solar lentiginos) on their faces or the backs of their hands; these marks are sometimes called 'liver spots' but are due to accumulated years of sun damage rather than liver problems.

The risk is increased if another family member has had a melanoma. People who have already had one lentigo maligna melanoma are at an increased risk of getting another one.

They occur most often in fair-skinned people who tan poorly, but they are also seen in olive-skinned people.

### **Is lentigo maligna hereditary?**

No, but it is more likely to develop if you have a close relative who has had melanoma. Genetic factors are less likely in lentigo maligna than in other types of melanoma, as sun exposure is by far the most important risk factor.

### **What are the symptoms of lentigo maligna?**

Lentigo maligna appears as a long-standing brown patch, most commonly on the face, which slowly enlarges and develops darker areas. Most in situ (very early) melanomas do not cause any symptoms. If a lentigo maligna is not treated promptly, it could become hard and lumpy, and bleed, ooze or crust.

### **What does lentigo maligna look like?**

The **ABCDE** system (below) tells you some of the things to look out for. A melanoma may show one or more of the following features:

- **A**symmetry – the two halves of the area differ in their shape.
- **B**order – the edges of the area may be irregular or blurred, and sometimes show notches.
- **C**olour – this may be uneven. Different shades of black, brown and pink may be seen.
- **D**iameter – most melanomas are at least 6 mm in diameter.
- **E**volution – rapid change in a pre-existing mole.

However this system is less useful for lentigo maligna than for other melanoma types. It is usually an enlarging brown mark on the face that is larger and/or darker than other marks, but can rarely be skin-coloured or pink.

### **What should I do if I am concerned about a mark on my skin?**

See your family doctor promptly. They will be able to see you without a charge; you do not need to pay to go to a 'mole clinic'. If your doctors have concerns they can refer you to a dermatologist.

### **How is the diagnosis of lentigo maligna made?**

If you are worried about changes in a mole, or about a new area of pigmentation appearing on your skin, you should see your family doctor. The ABCDE changes listed above can be found in completely harmless conditions, and your family doctor may be able to put your mind at rest. However, if there is still any doubt, your doctor will usually refer you to a specialist (a dermatologist with a special interest in pigmented lesions) who will examine the area carefully and decide whether it needs to be removed.

If the mole needs to be examined under a microscope, the suspicious area will then be removed under a local anaesthetic (a procedure known as excision) and sent to the laboratory to be examined. If the area is too large to remove easily, a sample of it (an incisional biopsy) may be taken. If a lentigo melanoma is found, the pathology report will provide information that will help to plan the next step in treatment.

### **Can lentigo maligna be cured?**

Yes, the outlook for lentigo maligna is excellent. It is very rare for them to come back because they were 'in situ'. Furthermore, they will not have had an opportunity to spread elsewhere in the body.

### **How should lentigo maligna be treated?**

The treatment for lentigo maligna is surgical. There is no other treatment of proven benefit, and usually no other tests are needed. Most people who have had a lentigo maligna removed will need another operation to try to prevent the melanoma from coming back at the original site. During the operation, some healthy skin will be removed from around the original scar to make sure that all of the melanoma has been taken away, and this makes the scar larger than before. Occasionally a skin graft will be needed.

In some people, it is not possible to remove the entire abnormal area, because it can be quite large and can merge with mildly abnormal areas at the edges. In order to avoid potentially disfiguring surgery, doctors will sometimes use other forms of treatment for lentigo maligna such as freezing with liquid nitrogen, application of a cream such as imiquimod, or radiotherapy.

If surgery leaves any noticeable scarring, you may wish to consider advice on [skin camouflage](#) techniques.

The British Association of Dermatologists and other health organisations such as NICE (National Institute for Health and Clinical Excellence) state that people who have had a lentigo maligna do not need any follow up visits with their specialist. This is because in situ melanomas are very unlikely to come back once the area has been removed. Because of the excellent outlook of lentigo maligna, you will usually be seen once again in clinic and then discharged.

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

Once your lentigo melanoma has been treated, you should be able to get back to a normal lifestyle quite quickly. You should also take a few sensible precautions to stop yourself getting another one, as below:

- You should look at all areas of your skin monthly for moles that are growing, or changing in the ways listed in the ABCDE rules (see above). If you find any worrying changes, see your family doctor promptly.
- You must also protect yourself from too much sun. This means that you need to avoid sunbathing, sunburn and tanning. You can do this by covering yourself up and using sun protection creams, especially if on holiday in a hot country (see the 'top sun safety tips' below for more information).
- Do not use sun beds or tanning lamps.
- Share sun advice and other information with your relatives as they also may be at increased risk of getting a melanoma. In particular, protect children from the sun, as exposure during childhood seems to be particularly damaging.
- Having had a melanoma does have some practical disadvantages. It can be difficult to obtain life or health insurance, particularly for the first five years

after your diagnosis. It can also be difficult to obtain a mortgage. However, some insurance companies will be flexible so long as it is confirmed to them that you only had a lentigo maligna as it was 'in situ' and not invasive, and was completely excised.

### *Top sun safety tips*

- Protect your skin with adequate clothing, and don't forget to wear a hat that protects your face, neck and ears, and a pair of UV protective sunglasses.
- Keep to 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.
- 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.
- 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.

### **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 find more information about lentigo maligna and melanoma in situ?**

This leaflet may not have answered all of your questions, but we hope it has helped. It is completely normal not to remember what your doctor or the nursing staff tells you initially at diagnosis. For this reason, they often say the same things to you a number of times. In many departments, a skin cancer specialist nurse is available to go through the information in more detail and to act as a contact link for patients when needed.

### *Links to patient support groups:*

#### *Macmillan Cancer Support*

89 Albert Embankment

London, SE1 7UQ

Tel: 0808 808 2020 / 0808 800 1234

Web: [www.macmillan.org.uk](http://www.macmillan.org.uk)

#### *Cancer Research UK*

PO Box 123, Lincoln's Inn Fields

London, WC2A 3PX

Tel: 020 7242 0200

Web: [www.cancerhelp.org.uk](http://www.cancerhelp.org.uk)

### Other useful websites:

[www.skincancer.org/melanoma](http://www.skincancer.org/melanoma)

[www.wessexcancer.org](http://www.wessexcancer.org)

For details of source materials used please contact the Clinical Standards Unit ([clinicalstandards@bad.org.uk](mailto: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.**

Thanks and acknowledgements are given to the authors of the melanoma in situ/lentigo maligna leaflet (Dermatology Department, Addenbrooke's Hospital) from which some of the information in this leaflet has been taken.

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

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