

# Lentigo Maligna

## Patient information

### What is lentigo maligna?

Lentigo maligna (LM) is an early form of pre-invasive melanoma in which cancer cells are confined to the top layer of the skin (epidermis). It may also be referred to as a special type of in-situ melanoma. It occurs most commonly on the face, ears and neck of people over the age of 60 with sun-damaged skin.

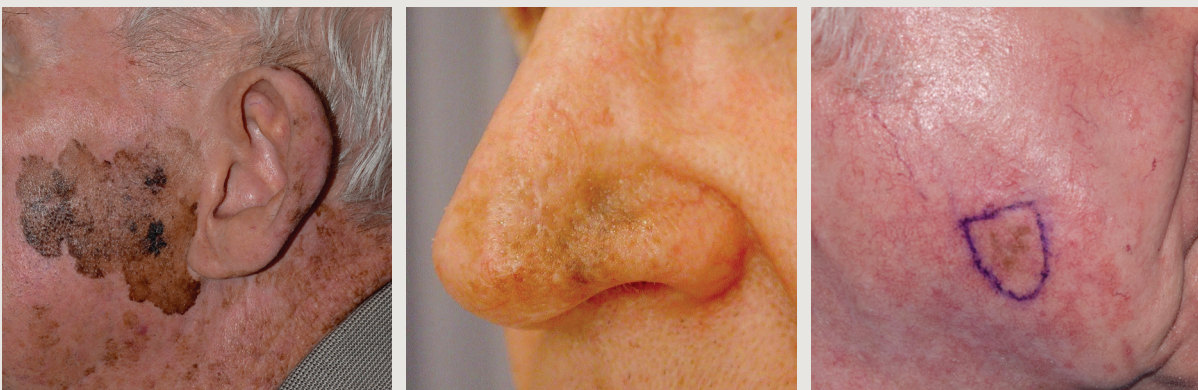
LM is highly curable when identified and treated early. Left untreated, LM can grow deeper into the skin and become an invasive form of melanoma called LM melanoma.

### What does lentigo maligna look like?

LM can look like a freckle, sunspot or light brown/pink or brown patch of skin that slowly changes colour, shape or size over time.

LM lesions usually occur on the head and neck but may also be found on the arms and back. The lesions can vary in colour from light brown to black and usually have an irregular shape and a smooth surface.

Typically, LM lesions do not cause any symptoms.



Examples of LM

## Causes and risk factors

The major risk factor for developing LM is exposure to ultraviolet radiation (UVR), via sun exposure or solarium use.

People are at higher risk of developing LM if they:

- have a history of sunburn or solarium use
- have fair skin
- have a history of non-melanoma skin cancer and precancerous lesions
- are male
- are older in age (>60 years).

## Diagnosis

It can often be difficult to tell the difference between LM lesions and other, non-cancerous spots or freckles. As LM lesions are very slow growing, they can often be missed or misdiagnosed.

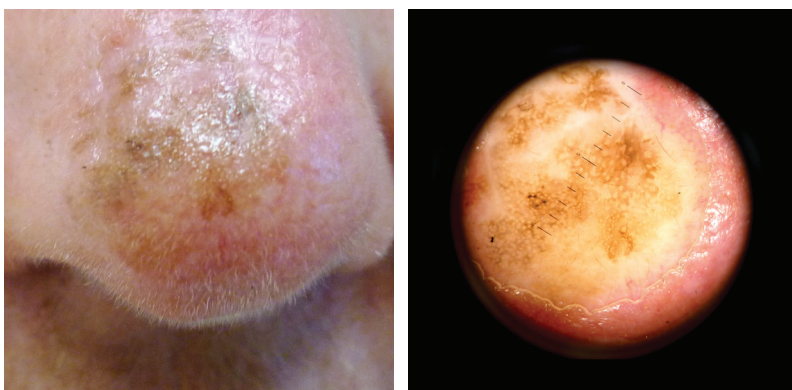
LM is usually diagnosed by a doctor – such as a GP, dermatologist or surgeon – following physical examination.

A tool called a dermatoscope can help identify the lesion during a skin check. A dermatoscope uses light and powerful magnification to take a closer look at the characteristics of the skin and the lesion.

If LM is suspected, a sample of the lesion will be removed confirm the diagnosis. This is called a partial biopsy. In some cases, if it is possible to do so, the entire lesion will be removed at this stage.



**A dermatoscope helps doctors to diagnose skin conditions more accurately as it shows extra detail that the eye can't see.**



**A view of an LM with the naked eye (left) and through a dermatoscope (right)**

# Treatment

## Surgery

The goal of treatment for LM is to remove all the cancerous cells while preserving the appearance of the skin.

Surgery is the standard treatment option for most people with LM. It involves cutting out the lesion, and a healthy margin of skin around the lesion to ensure all the cancerous cells have been removed. This is called a **wide local excision**.

The nature of LM means that the cancerous cells may be spread out over a wider area of the surrounding skin than in other forms of early melanoma. This means that a wider margin of skin around the lesion needs to be removed to achieve a clear margin.

The recommended clear margin of skin for LM is at least 5–10 mm. Achieving this margin can be difficult with the limited skin on the face and neck. There are a number of specialised techniques that can be used to try and ensure that clear margins are achieved during wide local excision, including:

- **Confocal microscopy.** A confocal microscope machine performs a scan of the surface of the skin. This provides an 'optical biopsy' of the skin so the extent of the LM can be more accurately defined prior to surgery being performed.
- **Mapping biopsies.** Multiple small pieces of skin (biopsies) are taken around the edge of the LM and sent to the pathologists to check where the LM ends.

An alternative approach to wide local excision is a **staged excision**. During a staged excision, the lesion and a healthy margin of skin is cut out and sent for priority investigation by pathologists. The wound is not stitched up at this stage. Instead, a special dressing is applied overnight while the patient and doctor await the results of the pathology investigation. If the results show that the healthy margin of skin is clear of cancerous cells, the wound can be closed. If not, more tissue will be removed, and the process repeated. This process can be repeated for up to one week until the cancerous cells have been completely removed.

Like all medical procedures, surgery can cause side effects. Side effects of surgery include:

- pain, tenderness or burning around the wound
- bleeding and bruising
- infection
- swelling
- scarring
- numbness or nerve damage to the skin around the wound

Treatments other than surgery may be considered on a case-by-case basis, depending on the characteristics of the LM lesion (e.g., it is quite large or in a difficult position) and the patient (e.g., elderly or other diseases).

- Your doctor will discuss the advantages and disadvantages of these treatments and develop a treatment plan with you.



**Confocal microscopy is a painless imaging technique that may prevent unnecessary biopsies and help your doctor provide more accurate diagnoses.**

## Radiotherapy

Radiotherapy uses high-dose x-rays to kill cancer cells. Radiotherapy for LM requires approximately 20 x 30-minute sessions over a 4–5-week period.

During treatment with radiotherapy, you may experience side effects, including:

- dryness, redness or swelling at the site of treatment
- peeling of the skin as treatment progresses
- hair loss in the treated area
- soreness in the mouth or eyes if they are close to the site being treated.

Rarely, some people experience wet skin peeling that requires dressing, and fatigue.

Long-term or late side effects can develop up to 6 months after radiotherapy treatment. These include:

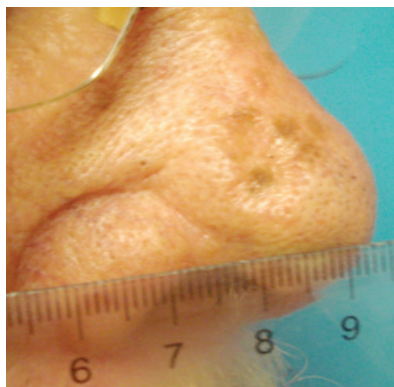
- persistent redness or swelling
- scarring of the skin tissue.

Other uncommon long-term side effects can include discolouration or whitening of the skin, formation of fibrous tissue under the skin and decreased skin elasticity.

Radiotherapy for LM will be planned to minimise damage to your healthy skin tissue. You will be regularly reviewed during treatment to manage any side effects you may experience.

## Topical immunotherapy

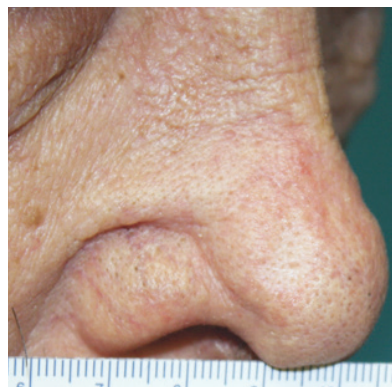
Imiquimod (also known as ImiQ or Aldara) is a type of cream that acts with the body's immune system to target and destroy cancerous cells. This type of treatment is called a topical immunotherapy.



**Lentigo maligna – before treatment**



**Treatment with imiquimod at 5 weeks**



**After treatment**

During treatment with imiquimod, you will be directed to apply the cream to the affected area of skin 5 nights per week over a 12-week period. You will have a follow-up visit with your doctor 4–6 weeks after commencing treatment, and again at the end of the 12-week treatment period.

As imiquimod starts working, your immune system will begin to attack the LM cells. This will cause a reaction in the skin you are treating. All patients who apply imiquimod cream should expect redness, itchiness, crustiness, dryness and inflammation at the treatment site.

Although these side effects may cause discomfort, they should not be painful. These side-effects indicate that the skin is responding to the treatment and are a marker for good response.

There are also some less common side effects which may or may not occur when using imiquimod cream, including:

- ulceration at treatment site
- pain and infection at the treatment site
- headaches
- muscle pain
- nausea
- fatigue
- flu-like symptoms.

If you experience any of these less common side effects, please contact your doctor as soon as possible as the treatment may need to be discontinued.

## Prognosis

LM has a good prognosis when identified and treated early. However, if left untreated there is a small risk that it will develop into the invasive LM melanoma that may spread throughout the body and be life-threatening.

Regular follow-up and skin checks are important to review the outcomes of treatment and monitor for any further areas of suspicion.

**Please note: The information in this brochure is of a general nature and should not replace the advice of healthcare professionals. All care has been taken to ensure the information presented here is accurate at the time of publishing (April 2022).**

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