

Acral melanoma

Patient information

What is acral melanoma?

The term 'acral' refers to the peripheral parts of your body, such as your arms and hands, legs and feet, and nails. Acral melanoma (also known as acral lentiginous melanoma or ALM) is a subtype of melanoma that occurs:

- on the palms of the hands
- on the soles of the feet
- underneath the fingernails or toenails (called subungual melanoma).

Acral melanoma is rare, accounting for about 1–3% of all melanoma diagnoses in Australia regardless of race. It is the most common type of melanoma diagnosed in people with darker skin tones, including people of African or Asian descent.

What causes acral melanoma?

Melanomas develop when there is abnormal growth of melanocytes – the cells that give your skin its colour.

What triggers the melanocytes to become cancerous in acral melanoma is not fully understood. Unlike other melanomas of the skin, sun exposure and ultraviolet radiation may not play a role.

What are the signs and symptoms of acral melanoma?

Acral melanoma typically begins as a small spot on the surface of the skin or discolouration on the nail plate.

Signs of acral melanoma on the skin include:

- a change in the colour, appearance, or size of an existing mole on the palm of the hand or sole of the foot
- a new spot or raised lesion.

It's important to know that moles on the hands and feet are common. They should be checked if they are changing or newly formed.

As acral melanoma progresses, the spot may become larger, lumpy, change in colour, or become ulcerated or painful.

Signs of subungual melanoma include:

- an area of discolouration underneath a fingernail or toenail
- a pink or brown lump or lesion growing underneath a fingernail or toenail
- a stripe of colour under the nail
- damage to a fingernail or toenail without a history of trauma, that does not heal.

As subungual melanoma progresses, the lesion may grow. This could show as the strip of colour on the nail getting wider, a lump under the nail growing bigger or the nail becoming progressively more damaged.

Sometimes, subungual melanoma will spread into the skin next to the nail. When the pigment from the nail extends into the nail fold, it is called the Hutchinson's sign.

Subungual melanoma can often go unnoticed, growing slowly under the nail. Sometimes, it can be misdiagnosed as a nail infection. As such, another sign of subungual melanoma may be when lesions that are thought to be benign (non-cancerous) fail to respond to appropriate treatment.



Examples of acral melanoma on the foot (top and middle) and subungual melanoma on the thumb (below).

How is acral melanoma diagnosed?

Acral melanoma is typically identified during a physical examination.

Your doctor may use a dermatoscope to take a closer look at a suspicious spot and identify the characteristics of acral melanoma.

If your doctor suspects a suspicious spot is an acral melanoma, you may need a biopsy to confirm the diagnosis. If the suspicious spot is in an area that is difficult to biopsy, you may be referred to a specialist with expertise in the area. For example, biopsies of an acral melanoma underneath the nail require removal of the nail to take a sample of the pigmented skin.

Sometimes, acral melanoma can spread to nearby lymph nodes or other areas of the body. If your doctor is concerned that there is a risk your melanoma has spread, you may also be recommended for blood tests, scans or a sentinel node biopsy to investigate if spread has occurred.

The **sentinel node** is the first lymph node or nodes that filter lymphatic fluid from the area of skin that has melanoma. If the cancer has spread, the sentinel node is the lymph node most likely to have cancer in it.

During a sentinel node biopsy, the specific nodes are identified and removed for testing. If the nodes are positive for melanoma, it is an indication that the melanoma has spread, and this will determine your treatment options.

You can read more about sentinel node biopsy in the Patient Brochure available at melanoma.org.au.

How is acral melanoma treated?

Treatment options for acral melanoma will depend on the size, location and spread of the melanoma.

Surgery

Surgery (called wide local excision) is the primary treatment for acral melanoma. It involves removing the melanoma and a margin of healthy tissue surrounding it.

The skin on the palms of your hands and the soles of your feet has a different structure to the skin on other areas of your body. This makes it easier for your hands and feet to perform everyday tasks, but it can make surgery in these areas more difficult.

As a result, you may need a reconstructive procedure, such as a skin flap or graft, as part of your surgical treatment. The size of any excision and type of reconstruction requires careful review and consideration by your treating specialist.

Surgery to treat subungual melanomas can be complex due to their location underneath the nail. In some cases, amputation of part of a finger or toe may be required.

For some people, surgery may be the only treatment that is required.

Treatment if the melanoma has spread

If acral melanoma has spread to the lymph nodes, you may also need surgery to remove the affected lymph nodes and medical (drug) treatments, such as:

- **Immunotherapy** – drugs that stimulate your body's own immune system to identify and destroy cancer cells.
- **Targeted therapy** – drugs that block the growth of cancer by attacking specific features of a cancer cell, known as molecular targets.

If acral melanoma has spread to other areas of the body, medical treatments are typically used first. In these complex cases, careful care under a multidisciplinary team is important to tailor an appropriate treatment plan to meet your individual needs.

Sometimes, cancer can be treated with radiotherapy, which uses x-rays to destroy cancer cells. Acral melanomas are not considered to be highly radiosensitive. This means, radiotherapy is not the most effective treatment option available. However, you may have radiotherapy in addition to other treatments if your acral melanoma has spread.

Who makes up the treatment team for acral melanoma?

Typically, acral melanoma will be identified by a **general practitioner (GP)** or a **dermatologist**.

In most cases, a biopsy will be needed before deciding on a treatment approach. Your GP or dermatologist may be able to conduct this biopsy. If the melanoma is in a hard-to-reach place, such as under a fingernail or toenail, you may be referred to a different **specialist or surgeon**.

The skin sample removed during a biopsy or excision will be examined by a **pathologist** to determine if it contains melanoma.

A dermatologist or specialist **surgeon** will conduct a wide local excision to remove the lesion.

If your melanoma has spread to other areas of the body, you may be treated by a **medical oncologist**.

Throughout your treatment journey, you may also be cared for by **nurses** or **allied health professionals**, such as a physiotherapist or occupational therapist.



Identifying genetic mutations of acral melanoma may help to inform the development of targeted therapies in the future.

Clinical trials

Research helps us to continually improve the treatment approaches for acral melanoma.

Clinical trials are used to test new treatments to see if they are better than the currently available treatments. They are vital for improving outcomes for people with cancer.

If your acral melanoma has spread, your doctor may suggest that you should take part in a clinical trial as part of your treatment. You can read more about clinical trials at australiancancertrials.gov.au.

What type of follow-up is required after treatment?

Even after correct and successful treatment of a melanoma there is a risk it could return at a later date. Routine follow-up after treatment for acral melanoma will help you and your doctor to keep an eye out for any signs of the melanoma recurring.

Your doctor will talk to you about the best follow-up schedule for your circumstances.



A follow-up appointment for acral melanoma will involve a routine whole-body skin check, as well as examination of the scar where the primary melanoma was removed. In some cases, where the melanoma has spread to another area, there is a role for ongoing tests and scans.

What is the prognosis for acral melanoma?

The prognosis for acral melanoma depends on a number of factors, including your age, gender, features of the melanoma and the stage of the disease at diagnosis.

In many cases there are effective treatments for acral melanoma and most patients will have a good prognosis.

For some tumours, there is a significant risk that the disease will return or spread to other sites. In these cases, prognosis may be more concerning. When acral melanoma has spread to other areas of the body, medical treatments are available. However, these treatments may not be as effective at destroying acral melanoma as they are at treating other more common types of melanomas.

Further reading

You may like to read some other patient information brochures and resources which may be relevant, dependent on the stage of your melanoma at [melanoma.org.au](https://www.melanoma.org.au):

- Pathology and staging
- Sentinel node biopsy

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 2023).