

# Melanoma of the foot

Acral melanoma is a subtype of cutaneous melanoma, which manifests on the palms, wrists and soles of the feet (including the nail unit). Melanoma on the soles of the feet may be unnoticed by the patient for many years, and can be misdiagnosed as other podiatric skin conditions, including plantar warts.<sup>1</sup>

The annual incidence of melanoma in New Zealand is approximately 35 to 40 cases per 100,000 people; acral melanomas constitute a minority of these cases (< 5%).<sup>2,3</sup> In people of European descent, 95% of melanomas are due to exposure to ultraviolet radiation, which is not thought to be an important factor for the development of acral melanomas.<sup>4</sup> However, acral melanomas make up a larger proportion of all melanomas in darker-skinned populations (including Pacific peoples),<sup>5</sup> and a substantial number of these occur on the feet.

Acral melanomas are typically thicker than other forms of melanoma at diagnosis and patients have a poorer prognosis, likely due to a later stage at presentation and diagnosis.<sup>6</sup> Acral melanoma can be found on any area of the foot, including weight bearing sites and the sides of the foot.<sup>7</sup> Lesions usually have a persistent irregular stain, with asymmetry of colour and structure.<sup>8</sup> Diagnosis of acral melanoma can be difficult if patients have hyperkeratotic lesions, with little or no pigmentation, similar to plantar warts (amelanotic or hypomelanotic melanoma – Figure 1).<sup>1,8</sup> A parallel-ridge

pattern of pigmentation seen on dermatoscopy is suggestive of acral melanoma.<sup>8</sup> Blue colouration is indicative of invasive melanoma. Acral melanoma may also involve the nail apparatus where it may present as atypical longitudinal melanonychia (a slowly widening and irregular band of discolouration in the nail plate), nail destruction or an irregular patch or nodule (which may be non-pigmented) in the skin lateral to, distal to, or under the nail plate.

Patients with suspected acral melanoma should be referred to a dermatologist to confirm the diagnosis.



**Figure 1:** Acral melanoma showing a hypomelanotic lesion (Image provided by DermNet NZ)

## References

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