

29 Melanoma in specific populations in Australia

Melanomaⁱ develops in both Caucasianⁱⁱ and non-Caucasian populations, although the incidence in non-Caucasians is lower than in Caucasians. Melanoma in non-Caucasians often presents in acral sites and in general, melanomas in non-Caucasians have a poorer clinical outcome. This, together with the growing proportion of non-Caucasians in the Australian population, highlights the need for awareness of melanoma in non-Caucasian groups.

29.1 Melanoma in non-Caucasians

29.1.1 Incidence data: non-Caucasians (non-Indigenous)

World wide, the incidence of melanoma in non-Caucasians is lower than in Caucasians.

Selected figures from Asia reveal very low melanoma incidence rates (per 100,000):¹

- Japan: 0.3–0.7 (male) and 0.3–0.5 (female)
- Hong Kong Chinese: 0.7 (male) and 0.6 (female)
- Philippines: 0.8 (male) and 0.6 (female)
- India: 0.4 (male) and 0.3 (female)
- Singapore: 0.5 (male Chinese), 0.3 (male Malay), 0.5 (female Chinese), 0.8 (female Malay).

In Australia, approximately 16% of the population identified their ancestry as non-Caucasian.² This percentage continues to increase due to trends in Australian immigration: the greatest change in migrant influx in the past 10 years has been the increased numbers from Southern and Central Asia as well as sub-Saharan Africa.³

This highlights the need for awareness and for strategies for the surveillance and management of melanoma in non-Caucasians.

Ethnic origin is a **major** factor in determining the risk of melanoma: the incidence of melanoma in various ethnic groups in the same region differs markedly from group to group.⁴

In Australia, the incidence of melanoma is considerably lower in non-Caucasian groups compared to the Australian-born population. Numerous studies have confirmed this for Asian and Middle Eastern migrants.^{5–8}

Melanoma constituted about 8% of all registered cancers in the Australian-born during the period 1972–1990 in New South Wales (NSW), but accounted for less than 2% in most of the immigrant groups.^{5–7}

i The term melanoma in this chapter relates to cutaneous melanoma only.

ii The term 'Caucasian' generally denotes people of European descent with type I or type II coloured skin (i.e. Anglo-Saxon or Anglo-Celtic).

29.1.2 Incidence data: Indigenous communities in Australasia

Aboriginal data

There is a paucity of data relating to the incidence and key features of melanoma in Aboriginal communities in Australia. This is multifactorial:

1. there is often incomplete identification of Indigenous people
2. there is probable under-notification of cases in most cancer registries
3. the available data are from a relatively short period only
4. the Aboriginal population is a minority groupⁱⁱⁱ and melanoma in Aboriginals is uncommon.

The available data reveal a low incidence of melanoma for Aboriginals in the Northern Territory: 5.6 (male) and 1.4 (female) per 100,000.^{iv,9} A similarly low incidence was found in NSW: 2.3 (male) and 2.1 (female) per 100,000.^{10,11} Melanoma comprised only 3% of all Indigenous cancer cases compared to 10% for the non-Indigenous population in NSW.

29.1.3 Non-Caucasian melanoma: distinguishing features

Non-Caucasians have a high proportion of melanomas in 'sun protected' skin regions. These include palms, subungual areas and in particular, soles.^{4,12–15}

In the Japanese¹³ and Hong Kong Chinese,¹⁶ the commonest site for melanoma is the sole of the foot.

Non-Caucasian groups generally present with more advanced, thicker tumours at diagnosis and thus have a poorer prognosis. This is reflected in a higher overall mortality^{4,12,17} which may be due to a low index of suspicion in relation to non-Caucasian melanoma and the fact that the more prevalent non-Caucasian sites such as the soles are not routinely included in mole checks.

World-wide, non-Caucasians have a much higher incidence of acral lentiginous melanoma (African American 60–72%; Asian 29–49%; Hispanic 20–34%, compared to Caucasians 2–8%)¹⁸ in contrast with the superficial spreading melanoma subtype seen in two thirds of Caucasian melanomas.¹⁹

The incidence of non-Caucasian melanoma increases with advancing age.²⁰

29.1.4 Conclusion

Melanoma *does* occur in non-Caucasians, even though it is a relatively uncommon cancer in these groups. In Australia, with the growing proportion of non-Caucasians in our population, both migrant and Australian-born, and the 'westernisation' of their life-styles, the issue of non-Caucasian melanoma is one of increasing significance.

iii Population in 2001 estimated nationally at 460,000 (2.4% of the total population).

iv Note: there was only a small number of documented cases (< 10), hence the actual incidence values need to be interpreted with caution.

29.2 Good practice point

- When examining melanocytic lesions in non-Caucasians, it is important to keep in mind the possibility of melanoma. Furthermore, the skin areas examined should include the palms, periungual and subungual skin and especially the soles of the feet

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