

areas, black areas, milky pink areas, atypical vessels, and symmetry of pigment pattern are more commonly identified.^[14] NM is more commonly found on severely sun damaged sites such as the head and neck of older individuals and is less commonly associated with large numbers of naevi.^[15] NM tend to exhibit more rapid vertical growth compared to SSM and LMM, and are much thicker at diagnosis.^{[16][4]}

Lentigo maligna melanoma

Lentigo Maligna (in-situ disease) may be present for months to years before invasion occurs. These lesions usually present as an asymmetrical pigmented macule which may occasionally be amelanotic (pink). Dermoscopic clues can be subtle, and include asymmetrical perifollicular pigmentation, grey and black dots (annular granular structures) and rhomboidal structures.

LMM (invasive disease) typically occurs on the head and neck of older patients and is associated with other signs of chronic sun exposure, such as solar lentigines, solar keratoses and non-melanoma skin cancer.

Desmoplastic melanoma

Desmoplastic melanoma also typically occurs on chronically sun-damaged skin, typically the head and neck, including the lip, nose and ears. It may arise de novo, or in association with a pre-existing lentigo maligna. It is more often amelanotic, firm or scar like in appearance. Dermoscopy is less useful in diagnosing DM unless features of an associated radial growth phase melanoma are present. It may be misdiagnosed clinically as a dermatofibroma, scar or non-melanoma skin cancer. Recurrence at the site of a previous biopsy diagnosed as benign on histopathology (e.g. as dermatofibroma, neurofibroma, scar) is not an uncommon presentation of DM as the histopathology can be difficult in some cases, particularly with partial biopsy. Review of previous pathology can be helpful where there is clinical suspicion.

Acral lentiginous and subungual melanoma

Acral lentiginous melanoma may arise de novo or from a pre-existing naevus and occurs more commonly on the sole than on the the palm. ALM may also arise from the nail apparatus (subungual melanoma). They may have a prolonged radial growth phase (similar to LMM) before becoming invasive. ALM typically presents with light asymmetric macular pigmentation, which may be patchy and therefore mistaken for a stain or bruise. Over 30% of cases are hypomelanotic.^[17] It has a predominant parallel ridge pattern on dermoscopy. Occasionally ALM can be verrucous and, particularly if hypomelanotic, may mimic plantar warts or tinea infection. If pared down, an ALM would not show the typical pinpoint vessels of a wart.

Subungual melanoma typically presents as longitudinal melanonychia (full length longitudinal brown to black pigment band arising from the nail matrix). This band typically broadens over time and dermoscopically one can observe streaks within the band with variable colour, thickness and spacing. Pigmentation of the proximal or lateral nail fold (Hutchinson's sign) may be present. Growth of the tumour may cause nail dystrophy and eventual destruction of the nail plate. Subungual haematoma is a common differential diagnosis and may be distinguished by the presence of multiple reddish globules at the periphery of the pigmented area. These will grow out when observed over months. Bleeding within a tumour may occur, however, and the presence of subungual blood can not be used to rule out melanoma.^[18] Hypomelanotic subungual melanoma may present as a nail dystrophy and readily be mistaken for nail trauma or infection.

Spitzoid melanoma

Spitzoid melanoma is at the malignant end of the spectrum of melanocytic lesions which includes Spitz naevus and atypical Spitz tumour. The typical benign Spitz naevus occurs in the young (usually <20) presenting as a pink dome-shaped symmetrical papule with a well defined border (10% are pigmented). Atypical Spitz tumour and spitzoid melanoma tend to present as larger lesions, often asymmetrical with more irregular border and surface, and pink to variegated, at any age but usually >10.^{[19][20]} Spitz type lesions are defined by their histomorphology with large