

Melanocytic nevus

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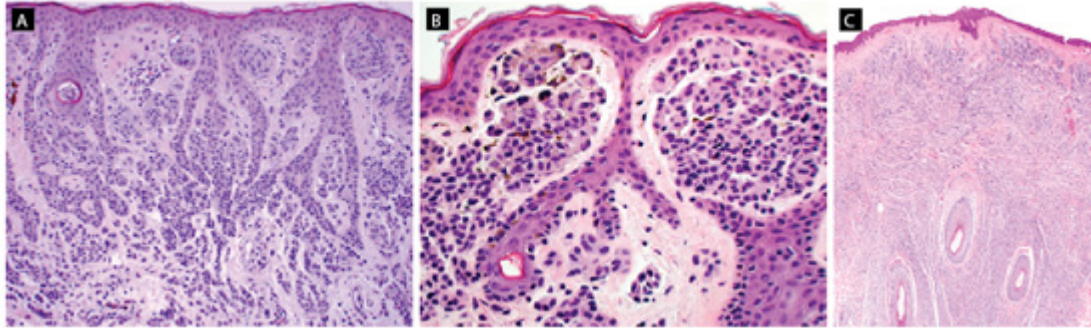


Figure. A: A compound melanocytic nevus contains nests of melanocytes at the dermal-epidermal junction. These nests get smaller as the cells mature and extend deeper into the dermis. B: In this intradermal nevus, nests of melanocytes are seen within the dermis only. Note the brown melanin pigment. Mitotic figures and atypia are not present. C: In this congenital nevus, nevocytes are seen within the dermis, close to the hair shafts and sebaceous units.

Nevus is an umbrella term used to describe a host of benign melanocytic growths. Most nevi are small (<0.6 cm), well demarcated, circumscribed lesions with variable pigmentation. Histologically, they are symmetrical.

Melanocytes can be confined to the epidermis (junctional nevus); they can involve the dermal-epidermal junction, including the dermis (compound nevus) (figure, A); or they can be found in the dermis only (intradermal nevus) (figure, B). Several patterns of growth can be seen. Frequently, the cells are nested or grouped in clusters. In the congenital pattern, melanocytes are seen deep in the dermis, adjacent to hair shafts and adnexal structures (figure, C). In the halo pattern, many lymphocytes are associated with the nevocytes. Spindling or fusiform cells resembling Schwann cells create a fascicular pattern. Sometimes the melanocytes expand and fill the rete pegs, bridging between them. Melanocytes can vary in size and shape but are usually small, polygonal cells. The deeper into the dermis they are found, the more mature the cells are, as evidenced by their being smaller and having less cytoplasm than less mature cells. Pigmentation may be present, found within the cytoplasm. Mitotic figures are usually sparse and do not include atypical forms.

The most important differential diagnosis for a nevus is malignant melanoma. Although several histologic features are necessary to confirm a diagnosis of malignant melanoma, suspicious clinical features include asymmetry, an irregular border, a change in size or color, bleeding, ulceration, pruritus, and a diameter greater than 6 mm. Nevi are typically only cosmetic problems, but when they are symptomatic, clinically suspicious, or located in an area that is difficult to monitor (e.g., the scalp or mucosa), the clinician can perform a shave biopsy, punch biopsy, or an elliptical excision to successfully remove them.

Suggested reading

McCarthy SW, Scolyer RA. Melanocytic lesions of the face: Diagnostic pitfalls. *Ann Acad Med Singapore* 2004;33(4 suppl):3-14.
Strungs I. Common and uncommon variants of melanocytic naevi. *Pathology* 2004;36:396-403.