

SKINimages

From Benign to Malignant: A Case of Nevus Sebaceous with Secondary Neoplasms

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Figure 1. A yellow-orange plaque on the vertex scalp, overlaid by a pink, eroded, exophytic mass

CASE REPORT

A 47-year-old man presented with a yellow-orange plaque on the vertex scalp, overlaid by a pink, eroded, exophytic mass (**Figure 1**). The lesion had been present since birth and was considered benign, leading the patient to forgo follow-up for decades. He presented to dermatology after noticing blood on his

pillow. Clinical examination revealed yellow-orange papules coalescing into a plaque with a centrally ulcerated tumor. A biopsy of the eroded mass demonstrated basaloid cell proliferation with peripheral palisading, lobules of clear glycogenated cells connected to the epidermis, stromal fibrosis, and ductal and glandular structures with papillary projections opening to the surface (**Figure 2, A and B**). The diagnosis of nevus sebaceous

with an associated basal cell carcinoma, syringocystadenoma papilliferum, and desmoplastic trichilemmoma was made.

DISCUSSION

Nevus sebaceous, also known as an organoid nevus, is a congenital cutaneous hamartoma characterized by an overgrowth of sebaceous glands, apocrine glands, and hair follicles.¹ Typically appearing as a solitary, waxy, yellow-orange plaque on the head or neck, it often manifests at birth or early childhood. While initially benign, nevus sebaceous is predisposed to developing secondary neoplasms later in life. A systematic review and meta-analysis reported that the overall rate of secondary neoplasms in nevus sebaceous is 12.8%, with malignant tumors occurring in 2.4% of cases and benign tumors in 10.3% of cases.² Trichoblastomas and syringocystadenoma

papilliferum are the two most common benign tumors associated with nevus sebaceous, primarily in patients over 40 years of age. These tumors typically develop after puberty as the lesion matures, possibly due to hormonal influences. It has been suggested that what were thought to be malignant growths in nevus sebaceous, often misdiagnosed as basal cell carcinoma, may actually be trichoblastomas due to their similar histological appearance.³ Given the propensity of secondary neoplasms to arise in these congenital nevi, many authors advocate for prophylactic excision before puberty to mitigate the risk and address potential cosmetic and functional concerns.^{2,4,5} Our case highlights a critical point in patient management: despite nevus sebaceous being a benign congenital lesion, continued surveillance is crucial due to the potential for malignant transformation and the development of secondary neoplasms.

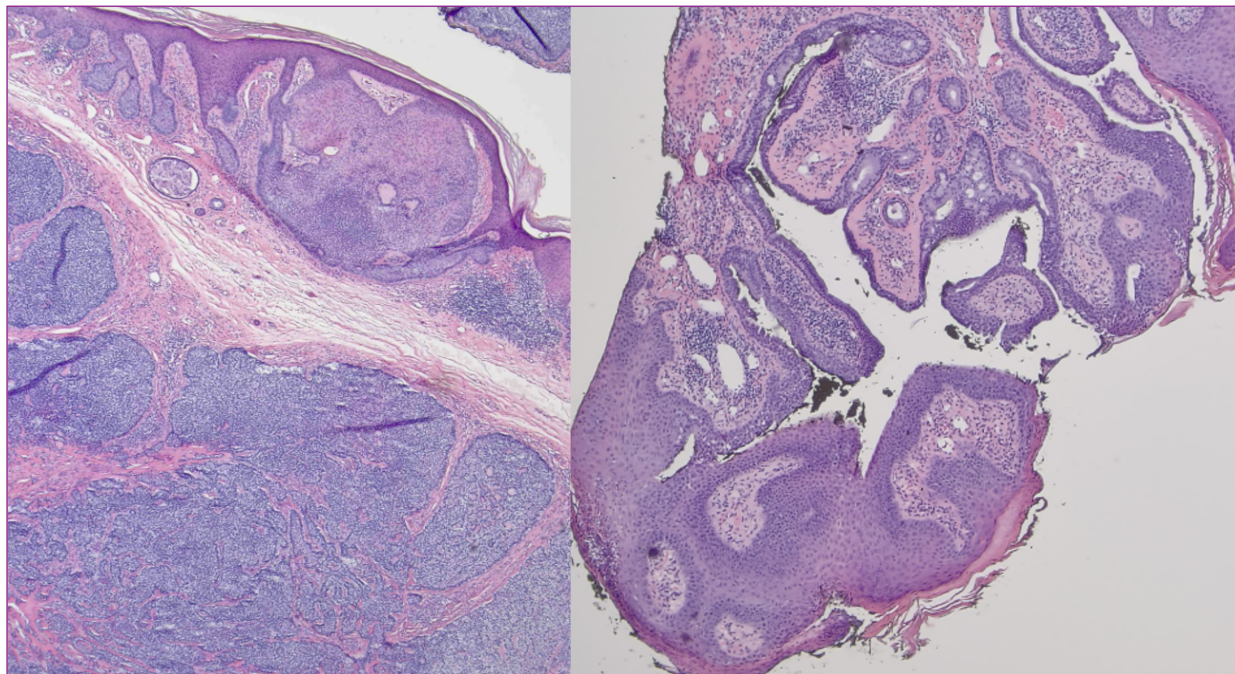


Figure 2. (A) Hematoxylin and eosin stain at 4x magnification demonstrating basaloid cell proliferation with peripheral palisading and lobules of clear glycogenated cells connected to the epidermis, associated with stromal fibrosis. (B) Hematoxylin and eosin stain at 4x magnification demonstrating ductal and glandular structures with papillary projections that open to the surface.

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