Spitz nevus, a case report and review of literature

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ABSTRACT

Spitz nevus usually appears in early childhood and usually occur between 10 and 20 years of age. They are typically pink to red and mostly affect the head and neck regions and lower extremities. Our case is a 6 years old and presented with a red nodue on her scalp. Histopathological examination revealed spindled and epithelioid melanocytes at the dermo-epidermal junction, features consistent with a diagnosis of Spitz nevus. This is a rare location and reported rarely.

INTRODUCTION

A 6 years old girl presented with solitary scalp nodule. This nodule was asymptomatic and of about 6 months duration. Skin examination revealed dome-shaped, slightly red of about 1 cm in diameter. The nodule was firm in consistency and not attached to underlying structures. Our clinical differential diagnoses were either

pilomatricoma or cylindroma. An excisional biopsy was done and revealed a dome-shaped nodule. The epidermis showed hyperplasia. There were spindled and epithelioid melanocytes at the dermo-epidermal junction. Some of these cells extend down to reticular dermis showing "raining-down" appearance.



Fig. 1-3 Erythematous nodule on the scalp.

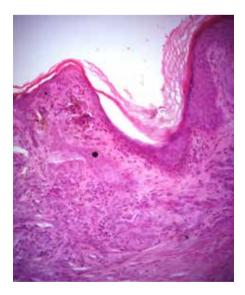


Fig. 4 Epidermal hyperplasia.

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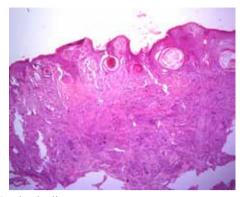


Fig. 5 Kamino bodies.

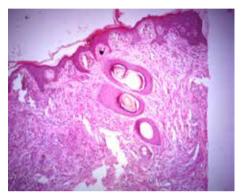


Fig. 6 Spindled and epithelioid melanocytes at the dermo-epidermal junction.

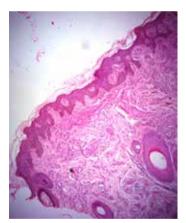


Fig. 7

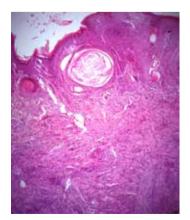


Fig. 8 Some cells extend down to reticular dermis.

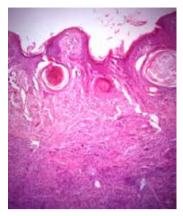


Fig. 9 "Raining -down" appearance.

FINAL DIAGNOSIS

Spitz nevus

DISCUSION

Spitz nevus usually appears in early childhood and was originally described by Spitz as "juvenile melanomas.1 Many Spitz tumors occur between 10 and 20 years of age. Classic Spitz Nevi (CSN) are frequently <10 mm in diameter, most being smaller than 5 to 6 mm. They most often feature symmetry, smooth topography, and sharply demarcated borders.³ They are typically pink to red because of limited melanin content and increased vascularity. However, approximately 10% of CSNs are pigmented with colors ranging from tan to brown to black.⁴ The most frequently affected sites include the head and neck regions (37%) and lower extremities (28%). Fewer lesions, perhaps only 6%, present on the back and may be a sign of a more atypical lesion. Lesions are typically solitary, with rare accounts of multiple Spitz nevi. When multiple, an agminated (grouped) or disseminated pattern may be seen.⁶ The etiology of multiple lesions is unclear, but various theories have been proposed, including a history of sunburn, trauma, or inoculation, along with a genetic predisposition.⁷ Scalp is a very rare site like our case.

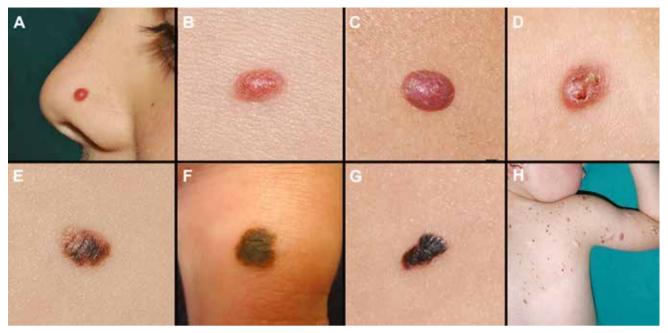


Fig 10 Clinical photographs of Spitz nevi. A, Classical Spitz nevi most frequently occur on the face. B-D, They appear as pink to red, well demarcated, dome-shaped papules that can be ulcerated. E, A minority of Spitz nevi are pigmented. F and G, Dense blue-black pigmentation is characteristic of the pigmented spindle cell nevus of Reed, which some consider a variant of Spitz. H, Multiple Spitz nevi are rare and often occur within a hyperpigmented patch such as a cafe-au-lait macule. (Photographs courtesy of Antonio Torrelo, MD.)

DERMATOSCOPIC FEATURES

The typical pink Spitz nevus exhibits little pigmentation on dermatoscopy and features a characteristic dotted vascular pattern (Fig 11).

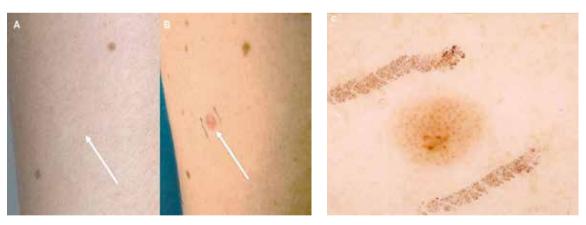
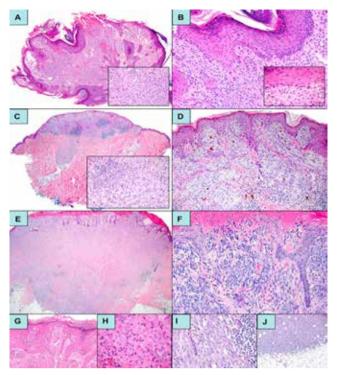


Fig 11 Clinicodermatoscopic correlation of a classical Spitz nevus. A and B, Total body photography reveals the growth of a Spitz nevus from previously normal skin. C, Dermatoscopy shows the typical dotted vessel pattern admixed with orange globular pigmentation for a classical, nonpigmented Spitz nevus. (Photographs courtesy of James Grichnik, MD, PhD.)

HISTOPATHOLOGY

Classic Spitz Nevi are compound in architecture. The epidermis remains notably undisturbed in most CSNs. Melanocytic nests neatly weave between keratinocytes.⁸ Eosinophilic

globules, commonly known as Kamino bodies, may be present intraepidermally and in aggregates at the dermoepidermal junction. Kamino bodies are composed of basement membrane material.⁹ Other characteristic epidermal fea-



tures include a regular pattern of symmetrical epidermal hyperplasia and clefting related to retraction artifact around junctional nests.⁸ Overall, growth patterns in Spitz nevi are perceived more as ordered versus disordered.⁸

Classic Spitz nevus. This example is a symmetric polypoid lesion, with predominant dermal nests of epithelioid cells. Inset: Cells in Spitz nevi are large, polygonal-round, with low nuclear to cytoplasmic (N/C) ratio, amphophilic cytoplasm, and distinct nucleoli.

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