Dermatology Practical & Conceptual

Pediatric Case of Compound Spitz Nevus with Somatotropin Treatment: Rare Clinical Findings and Diagnostic Approach

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Case Presentation

A 10-year-old female patient, phototype V, short stature, had a lesion in the occipital region with a 6-month progression. It started as a red papule, measuring 0.5 cm, with stability for three months. During this period, the child started subcutaneous somatotropin for short stature, coinciding with significant lesion growth. On dermatological examination, a nodular multilobulated lesion with firm consistency and pink-to-red tones was observed, measuring approximately 2 centimeters (Figure 1A). Dermoscopy revealed shiny white structures, atypical vessels, reddish and pinkish areas, and remnants of grayish pigment (Figures 1B and 1C).

Histopathological findings showed a compound melanocytic nevus with a predominance of fusiform cells (Figure 1D). Immunohistochemical study revealed positivity for S100, SOX10, p16, and Ki67 and negativity for HMB45, CD31, CD34, CD57, and Tyrosinase (Figure 1E), findings consistent with a compound Spitz nevus (SN).

Teaching Points

SN is a rare melanocytic neoplasm of fusiform cells which typically appears in childhood. Dermoscopically, SN are typified by three main patterns: starburst, regularly distributed dotted vessels, and globular with reticular depigmentation. Nodular lesions should be excised or closely monitored [1]. There is limited scientific evidence linking melanocytic nevus increase with the use of growth hormone. However, there is a possibility that preexisting melanocytic nevi may be stimulated by exogenous somatotropin, leading to lesion growth [2].

This case represents an atypical presentation of SN, characterized by a multilobulated morphology distinct from the

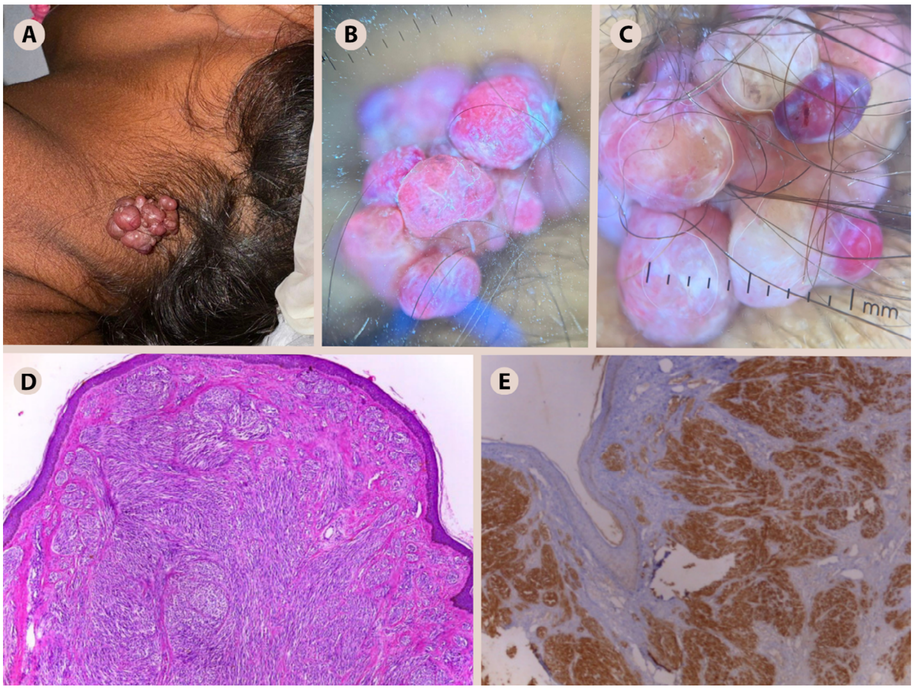

Figure 1. (A) Multilobulated, firm, pink-to-red nodular lesion located in the occipital region. (B, C) Dermoscopic examination reveals shiny white structures, atypical vessels, pinkish to reddish areas, and remnants of grayish pigment. (D) Histopathology demonstrates a compound melanocytic nevus with a predominance of fusiform cells. (E) Immunohistochemical staining shows positivity for S100.

previously described polypoid lesions and an unusually rapid growth rate potentially associated with somatotropin use.

References

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