

## Atypical Spitz Nevus: Dermoscopic, Confocal Microscopic and Histopathological Correlation

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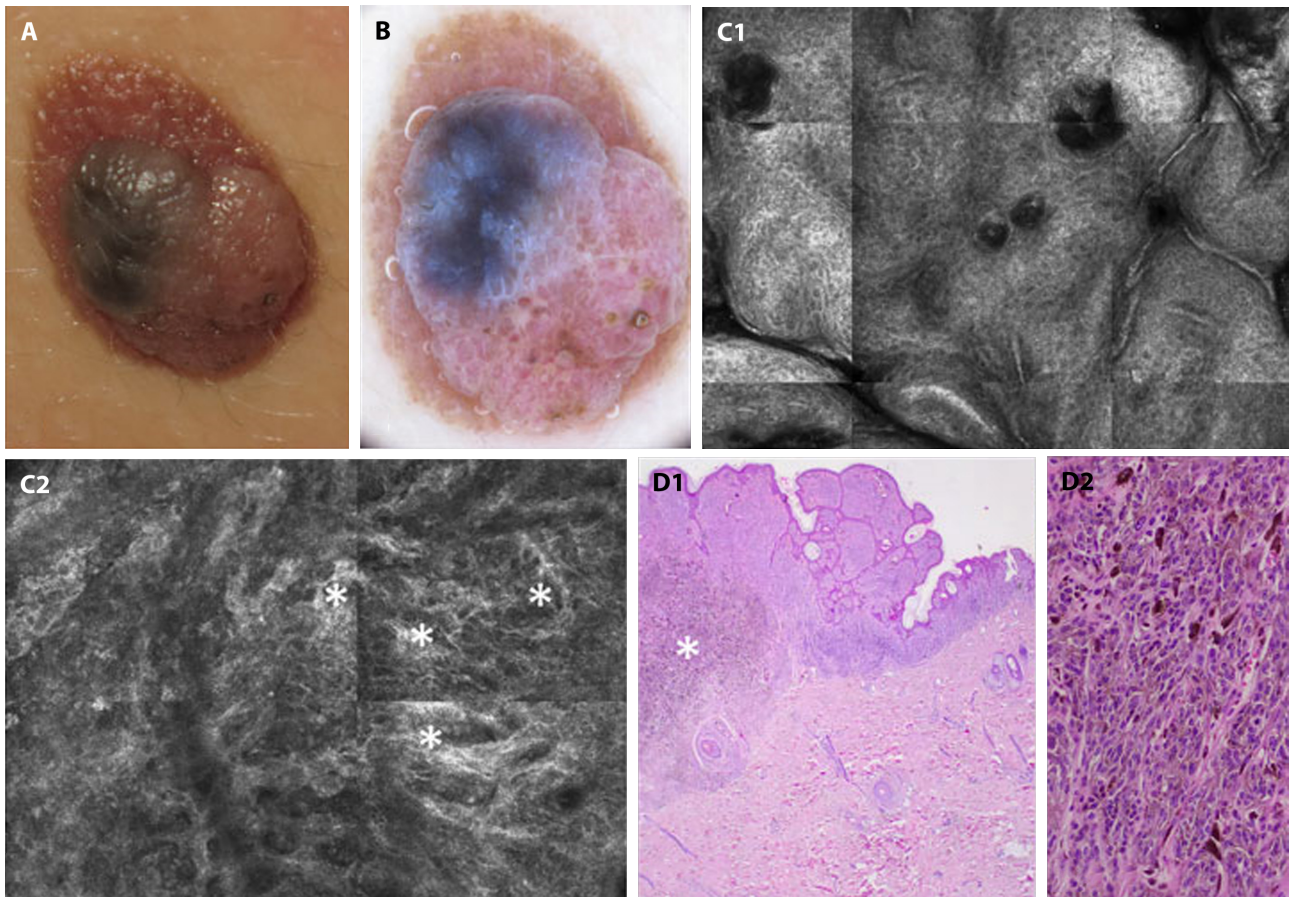
### Case presentation

A 12-year-old girl was observed for a new asymmetric pink and black papule on her back. Dermoscopy revealed a multicomponent pattern with pink pigmentation, and blue-white veil. By reflectance confocal microscopy (RCM) overall asymmetry was noted. Irregular honeycomb pattern of the epidermis and compact dermal nests, matching the pink pigmentation area were evident while, in the blue-white veil dermoscopic area, multiple superficial dendritic cells and an irregular meshwork pattern at the dermal-epidermal junction were seen. Considering these findings, surgical excision was performed. Histopathological examination disclosed an asymmetric compound proliferation of melanocytic epithelioid cells. Its junctional element was predominantly nested, whereas the dermal aspect was highly cellular with fascicles of slightly pleomorphic epithelioid cells throughout the entire dermis. These findings favored the diagnosis of atypical Spitz nevus.

### Teaching point

Atypical Spitz nevi represent an intermediate category of melanocytic lesions whose differentiation from melanoma is difficult because of overlapping features [1]. RCM represents a noninvasive diagnostic add-on, but RCM features of atypical Spitz tumors are not well characterized [1,2].

Confocal features that may help to differentiate Spitz nevi from melanoma have already been identified [2]; however, a study from Guida et al stated that RCM was not useful in lesions with multicomponent or unspecific dermoscopic patterns since many “malignant” features were shared between both entities [1]. We are able to overcome this gap if we consider the patient age when evaluating a spitzoid lesion. Besides that, this case illustrates the RCM features of an atypical Spitz nevus with an impressive dermoscopic and histopathological correlation.



**Figure 1.** Spitz nevus. (A) Clinical picture: asymmetric 1cm diameter papule with uneven pink and black color. (B) Dermoscopy picture: multicomponent pattern with irregular brown and pink pigmentation, and blue-white veil. (C) Confocal microscopy picture: C1 - epidermal honeycombed structures and thin dermal papillae; C2 - irregular meshwork pattern at the dermal-epidermal junction and associated areas of totally disarranged papillary contours owing to multiple bright fusiform cells with dendrites (white asterisks). (D) Histopathological pictures: D1 - Overall asymmetric polypoid-like melanocytic compound proliferation with an important deep component. The junctional element of the lesion is predominantly nested while the dermal aspect is highly cellular (white asterisk) (H&E, x25). D2 - Higher magnification showing the cellular dermal component of slightly pleomorphic epithelioid cells organized in fascicles. These cells immunostaining for HMB-45 was positive throughout the entire dermis (H&E, x100).

## References

1. Guida S, Pellacani G, Cesinaro AM, et al. Spitz naevi and melanomas with similar dermoscopic patterns: can confocal microscopy differentiate? *The Br J Dermatol.* 2016;174(3):610-616. DOI: 10.1111/bjd.14286. PMID: 26554394.
2. Pellacani G, Longo C, Ferrara G, et al. Spitz nevi: In vivo confocal microscopic features, dermoscopic aspects, histopathologic correlates, and diagnostic significance. *J Am Acad Dermatol.* 2009;60(2):236-247. DOI: 10.1016/j.jaad.2008.07.061. PMID: 19091443.