QUIZ SECTION

Desmoplastic Melanocytic Naevus in a Paediatric Patient: Dermoscopical and Histopathological Findings of a Rare Entity: An Overlooked Diagnosis or a Misnomer?

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A 15-year-old female patient with an erythematous nodule in the periocular area for 6 years was referred to our dermatology outpatient clinic. On dermatological examination, a pinkish erythematous nodule on the right eyebrow was revealed (Fig. 1a). Dermoscopical examination showed linear and glomerular vessels arranged focally on the pinkish erythematous background (Fig. 1b). The lesion was totally excised by the Department of Plastic and Reconstructive Surgery. Histopathological examination revealed scattered nevoid cells in the collagenized desmoplastic dermis (Fig. 2a). Nevoid cells were positive for SOX10 (Fig. 2b) and Melan A (Fig. 2c), whereas staining for HMB45 and p16 was negative (Fig. 2d and e).

What is your diagnosis?
1. Spitz naevus
2. Spitzoid melanoma
3. Desmoplastic melanocytic naevus
4. Intradermal naevus

See next page for answer.

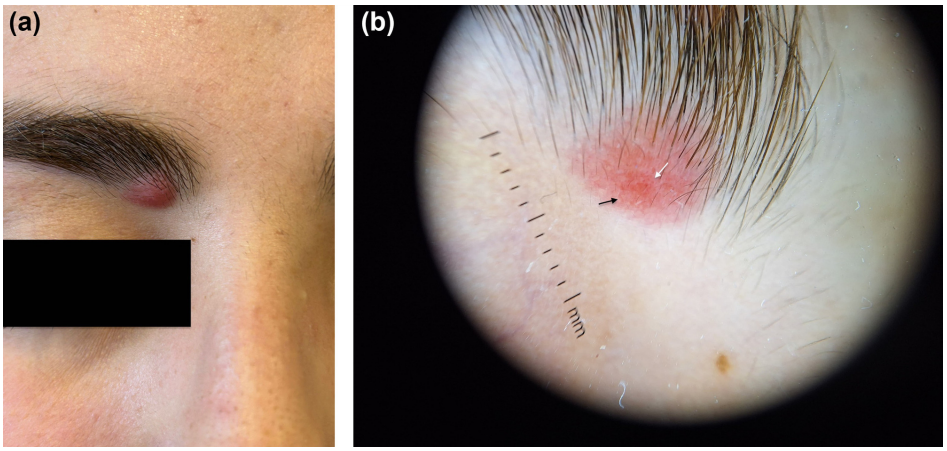

Fig. 1. (a) Pinkish erythematous nodule on the right eyebrow. (b) Focally distributed linear (black arrow) and glomerular vessels (white arrow) on the pinkish erythematous background.

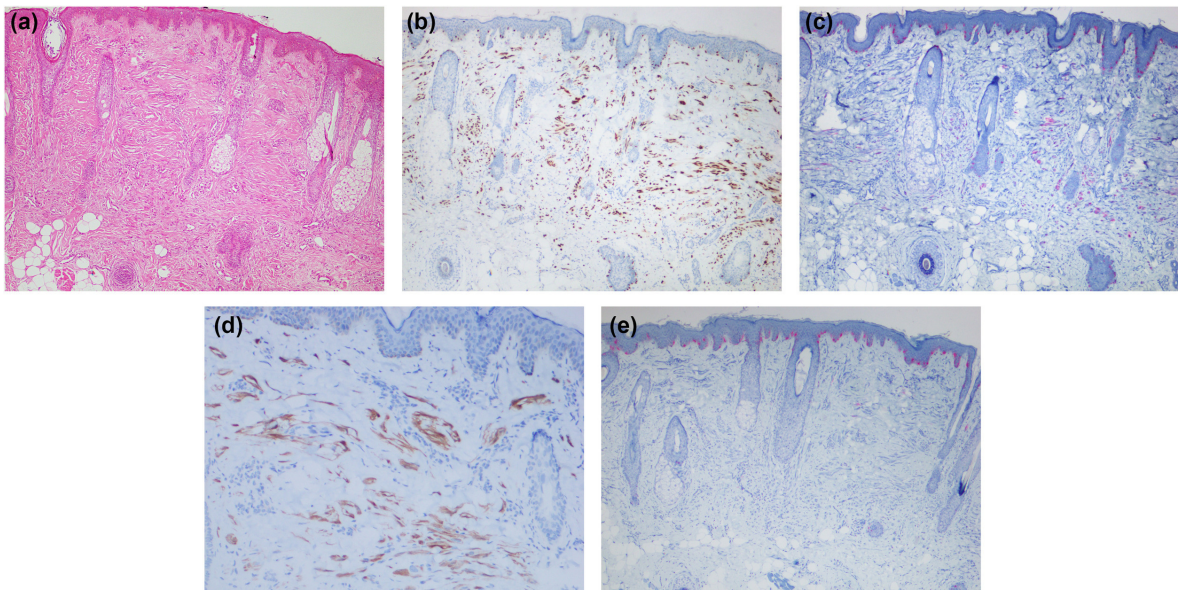

Fig. 2. (a) Nevoid cells scattered in collagenized desmoplastic dermis (H&E, ×40), (b) positive SOX 10 staining (×40), (c) positive Melan A staining (×40), (d) p16 negative (×100) and (e) HMB45 negative (×40).

ANSWERS TO QUIZ

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***Diagnosis*: Desmoplastic melanocytic naevus**

Based on the clinical and histopathological findings, desmoplastic naevus (DN) was diagnosed. DN is an erythematous, pink-coloured or slightly pigmented papule or nodule and is histopathologically characterized by spindle-shaped cells within a fibrotic stroma (1–3). In 1975, DN was first described and considered as a variant of Spitz naevus (SN) (1, 2). However, Barr et al. suggested that DN is not a variant of SN and is a unique histopathological entity (3). In 1992, this idea was also supported by Mackie and Doherty (4).

Scientific reports on DN are generally based on histopathological findings. However, there is only 1 case series of 3 patients with DN in which dermoscopical features are described (5). Herein, we report a 15-year-old girl with DN, and our case represents the second report describing clinical, dermoscopical and histopathological findings.

Histopathologically, DN has an intradermal growth pattern characterized by the presence of compact sclerotic or desmoplastic dermal collagen, composed of large spindle and/or epithelioid cells in a fibrotic stroma (2, 4, 5). Mackie and Doherty (4) also described absent or sparse melanin pigment in DN in their report (4). In our case, although Melan A and SOX 10 were positive, we did not observe any pigment structure dermoscopically or clinically.

There are benign and malignant cutaneous lesions, including desmoplastic Spitz naevus (DSN), DN, dermatofibroma, sclerotic blue naevus and desmoplastic melanoma, that are characterized by dermal proliferation with a desmoplastic component (5). DSN and DN may present similar characteristics such as patient age, location and clinical manifestations. Although it has been suggested that DSN can be easily differentiated from DN based on dermoscopical findings, as we show in our case, the dermoscopical features of paediatric DN may be mistaken for those of DSN. Dermoscopically, SN may present with homogenous pink colour, dotted, hairpin, linear or comma-like vessels and reticular depigmentation (2, 3, 5, 6). In our case, there were linear irregular and glomerular vessels similar to the vascular features in SN. However, in our case, the vascular structures were focally distributed, whereas in SN, it can be suggested that these vessel structures would be arranged regularly throughout the lesion.

Ferrara et al. reported similar dermoscopical findings in all their DN cases (5). However, in their report, all patients were female, and none were paediatric cases (aged 56, 38 and 22 years). Our case is the first reported paediatric case with dermoscopical findings (5). Furthermore, we showed polymorphic vessels, which can be mistaken for those seen in other malignant cutaneous lesions, such as melanoma, and also for the features of SN. In addition, although Ferrara *et al*. (5) reported a light brown network on a pinkish erythematous background in all their cases, we did not observe any pigment network in our case.

DN is a rare condition, and it has been suggested that DN may represent a variant of SN. We support the suggestion that DN is a separate entity from SN, and it is clear that additional reports are needed to describe the dermoscopical features of this naevus type in both children and adults. Dermatologists should be aware that DN may present with different atypical dermoscopical features in children.

REFERENCES

1. Reed RJ, Ichinose H, Clark WH Jr, Mihm MC Jr. Common and uncommon melanocytic nevi and borderline melanomas. Semin Oncol 1975; 2: 119–147.
2. Paniago-Pereira C, Maize JC, Ackerman AB. Nevus of large spindle and/or epithelioid cells (Spitz's nevus). Arch Dermatol 1978; 114: 1811–1823.
3. Barr RJ, Morales RV, Graham JH. Desmoplastic nevus: a distinct histologic variant of mixed spindle cell and epithelioid cell nevus. Cancer 1980; 46: 557–564. https://doi.org/10.1002/1097-0142(19800801)46:3<557::aid-cncr2820460323>3.0.co;2-l
4. Mackie RM, Doherty VR. The desmoplastic melanocytic naevus: a distinct histological entity. Histopathology 1992; 20: 207–211. https://doi.org/10.1111/j.1365-2559.1992.tb00958.x
5. Ferrara G, Brasiello M, Annese P, Francione S, Giorgio CM, Moscarella E, et al. Desmoplastic nevus: clinicopathologic keynotes. Am J Dermatopathol 2009; 31: 718–722. https://doi.org/10.1097/DAD.0b013e3181a9f0ee
6. Kilinc Karaarslan I, Ozdemir F, Akalin T, Ozturk G, Turk BG, Kandiloglu G. Eruptive disseminated Spitz naevi: dermatoscopic features. Clin Exp Dermatol 2009; 34: e807–10. https://doi.org/10.1111/j.1365-2230.2009.03540.x