An Asymptomatic Plaque on the Chest: A Quiz

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A 38-year-old woman presented with a 2-month history of an asymptomatic erythematous plaque on the jugular notch area (Fig. 1). Dermoscopy revealed erythema at the border of the lesion, while milky-red areas and linear-irregular vessels were seen in the inner part of the lesion. No radial streaming, pseudopods, peppering, or atypical pigmented structures were found. The lesion was surgically removed and histology showed the presence of spindle cells, some with atypical characteristics, randomly aligned and dispersed within an abundant fibrous tissue (Fig. 1b, c). Furthermore, an inflammatory infiltrate within the spindle-cell proliferation was observed. The patient had had a stage IIB bulky Hodgkin’s lymphoma (HL), and had been in complete remission for 5 years after 6 courses of multi-agent chemotherapy, followed by radiotherapy of the mediastinal area. Six months previously, below the suspicious plaque, the patient had had a hypertrophic scar on the site of the peripherally inserted central catheter (Fig. 1, red arrow).

What is your diagnosis? See next page for answer.

Fig. 1. (a) Erythematous plaque on the jugular notch (black arrow) above a previously treated hypertrophic scar (red arrow). Inset: Dermoscopic characteristics of the lesion (from the border to the inner part): erythematous border, milky-red areas with linear-irregular vessels. (b) The presence of spindle cells, randomly aligned and dispersed within an abundant fibrous tissue, with a co-existing inflammatory infiltrate within the spindle-elements (haematoxylin and eosin (H&E) ×10). (c) Some cells showed atypical characteristics (H&E ×40).
An Asymptomatic Plaque on the Chest: A Commentary


Diagnosis: Desmoplastic melanoma

On histopathology neither neurotropism nor nerve invasion were detected. On immunohistochemistry, the spindle-shaped cells were MART-1 and Melan-A negative, while expressed S-100 molecule (Fig. 2a). The desmoplastic melanoma (DM) diagnosis (Breslow thickness 0.6 mm, 0 mitosis, no ulceration) was further supported by the strong positivity of SOX-10 marker (Fig. 2b). Re-excision of 1-cm margins did not show any residual neoplastic cells. No disease recurrence was observed after one year of follow-up.

DM is a rare melanoma variant with non-specific clinical characteristics, thus it is difficult to reach the correct diagnosis (1–5). Based on the presence/absence of a desmoplastic component, Busam et al. (6) have suggested 2 categories: the pure and the mixed (pDM and mDM, respectively). At immunohistochemistry, the disease usually shows positivity for S-100 molecule, while Melan-A and HMB-45 staining is negative. Local recurrence is more common (from 11% to 40% of reported cases) than lymph node involvement (0–18%) (1). At dermoscopy, DM can show the presence of dermoscopic criteria for melanocytic tumours (i.e. atypical pigmented network, radial streaming, pseudopods, dots or globules) in cases associated with non-DM subtype. However, none of the above-mentioned characteristics were observed in our patient. In accordance with Debarbieux et al. (4), the analysis of the vascular pattern, consisting of the presence of linear-irregular vessels and milky-red areas, was helpful to suspect a melanoma. Differential diagnosis should encompass HL dissemination to the skin, spontaneous keloid scar on a chronic radiodermatitis area, and myoepithelial tumour. HL skin-involvement is consis-


REFERENCES


8. Yoo MG, Kim IH. Keloids and hypertrophic scars: characteristic vascular structures visualized by using dermoscopy.


