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CASE REPORT

Late recurrence of dermatofibrosarcoma protuberans in the female breast: a case report☆

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Summary The case presented is of a 39-year-old female who, at the age of 13 years, had had a 'dermatofibroma' excised from her left breast. Twenty-six years later she developed an unsightly 'stretched scar'. Excision biopsy demonstrated a dermatofibrosarcoma protuberans (DFSP). This was managed by wide local excision, preservation of the nipple–areolar complex, and immediate reconstruction with a pedicled latissimus dorsi flap. Review of the original histology confirmed the presence of DFSP, revising the original diagnosis. Most DFSPs recur within 3 years of primary excision. Such prolonged latency prior to recurrence has not been previously described. This reinforces the need to educate patients regarding the importance of long-term scar surveillance following skin tumour excision.

Dermatofibrosarcoma protuberans (DFSP) is an uncommon, slow-growing, low-grade sarcoma of putative dermal fibroblastic origin.[1] Being relatively resistant to chemotherapy and radiotherapy, surgery provides the mainstay of treatment.[2]

Although metastases are rare, there is a marked propensity for local recurrence, which is related to the adequacy of excision. Recurrence rates as high as 50% have been reported with resection margins of less than 1 cm, whilst with primary resection margins greater than 5 cm, no recurrences were noted at 5 years in a cohort of 66 patients.[1,3] DFSP recurrences usually develop within 3 years, although, exceptionally, late recurrences may occur.[2,4]

Case report

We report the case of a 39-year-old lady who, at the age of 13, had a skin lesion excised from the upper medial quadrant of her left breast, which was reported as dermatofibroma with some unusual features. The scar had become stretched and unsightly, a fact the patient attributed to a recent

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pregnancy and subsequent breast-feeding. She was otherwise asymptomatic, with no other significant past medical history, and no family history of breast disease. She was referred by her General Practitioner for a routine scar revision.

Clinically, the scar measured 5×2.5 cm and appeared stretched and atrophic. It was heterogeneous in colour with a nodular consistency (Fig. 1). The scar was mobile. There was no associated lymphadenopathy, and the contra-lateral breast was normal. The differential diagnosis included delayed hypertrophic scar formation, a recurrent dermatofibroma, or possibly the cutaneous manifestation of underlying breast pathology.

An excision biopsy would address the need for a tissue diagnosis and the requirement for aesthetic improvement of the scar. The scar was therefore excised as an ellipse with a 2 mm margin as a general anaesthetic day case procedure (Fig. 2).

Histology demonstrated an ill-defined dermal tumour infiltrating the subcutaneous and breast fat in a 'lace-like' manner (Fig. 3a). It was composed of monomorphic, spindle-shaped cells arranged focally in a storiform pattern. There were occasional mitoses. There were several foci containing small multinucleate giant cells resembling giant cell fibroblastoma. Immunohistochemistry demonstrated strong diffuse expression of CD34 by the tumour cells (Fig. 3b). They did not express

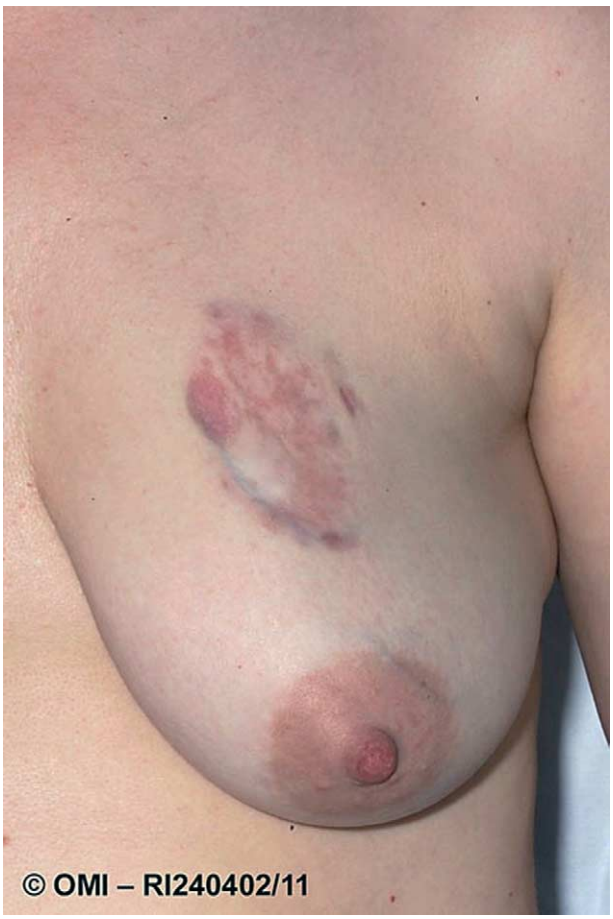

Figure 1 Presenting appearance of the 'stretched scar' involving the left breast.

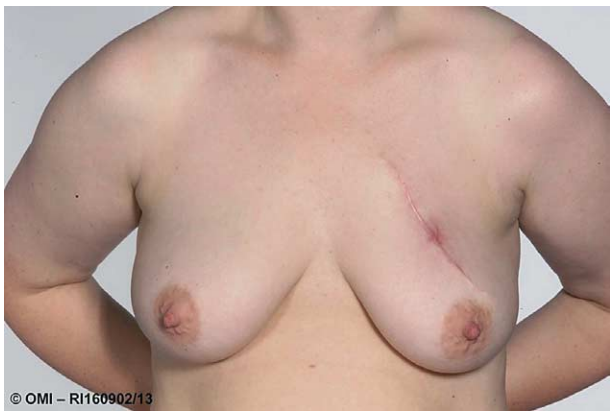

Figure 2 Appearance of the left breast following excision biopsy.

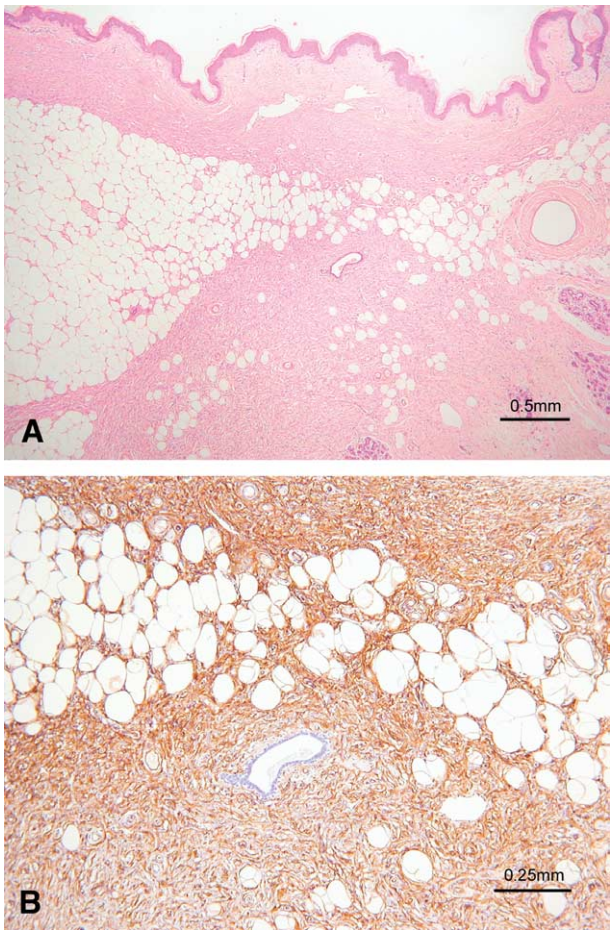

Figure 3 (a) A monomorphic spindle cell proliferation extends from the dermis into the underlying fat and breast tissue, producing a characteristic lace-like pattern of infiltration (H&E stain). (b) An immunoperoxidase stain for CD34, showing strong expression by the tumour cells.