



Image Report

Dermatofibrosarcoma of the scalp

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Received : 17 October 19
Accepted : 22 October 19
Published : 15 November 19

DOI
10.25259/SNI_458_2019

Quick Response Code:



ASBTRACT

A 25-year-old woman presented with a 4 months history of progressive pain and tumefaction in the right parietal region. Deformity of the scalp was evident, and a biopsy was taken, reporting a high-grade dermatofibrosarcoma. She underwent surgical management, achieving a gross total resection. Dermatofibrosarcoma protuberans is a rare tumor arising from the dermis. It tends to have an indolent course and local recurrence after excision.

Keywords: Dermatofibrosarcoma, Protuberans, Scalp.

A 25-year-old woman presented with a 4 months history of tumefaction in the right parietal region. Magnetic resonance imaging was performed [Figure 1a and b]. She underwent surgical management, achieving a gross total resection [Figure 2a and b]. Histopathologically, characteristic “storiform” or “cartwheel” pattern fibroblastic arrangement was observed [Figure 3a-d].^[1] Dermatofibrosarcoma protuberans (DFSP) is a rare tumor arising from the dermis.^[6] It tends to have an indolent course and local recurrence after excision.^[5] The most common locations are the trunk and arms, reaching 80%, whereas scalp DFSP accounts for 5%.^[2] Resection must be performed and complete excision pursued, with defined margins of at least 2.5 cm.^[3] Recurrence rates are reported from 1.6% to 40%.^[4] Differential diagnosis should include dermal fibrous histiocytoma, myxoid nerve sheath tumor, myxoid liposarcoma, plexiform fibrohistiocytic tumor, and desmoplastic melanoma.^[7]

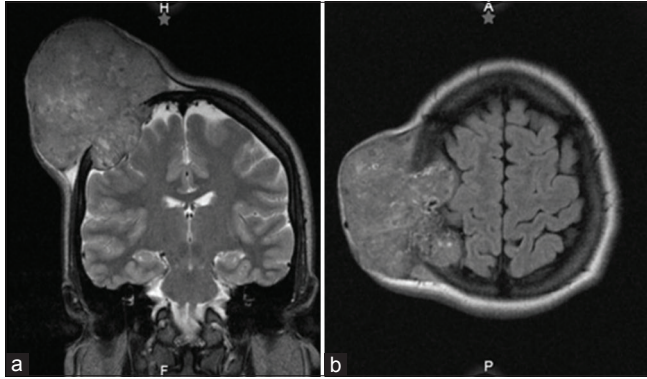


Figure 1: Magnetic resonance imaging: (a) coronal T2 weighted sequence and (b) axial T1 weighted sequence, which show a solid, homogeneous, and exophytic mass in the right parietal region. Bone erosion is present; however, brain parenchyma invasion is not evident.

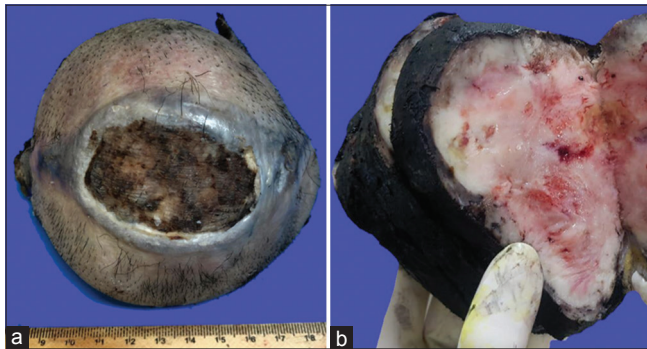


Figure 2: Macroscopic findings. (a and b): a greyish, solid, soft, and homogeneous tumor with an ovoid irregular shape weighing 500 g and measuring 12.5 cm × 10.5 cm × 8 cm was completely resected. In the uppermost portion of the lesion, an ulcerated area of 7 cm × 5.5 cm was observed.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

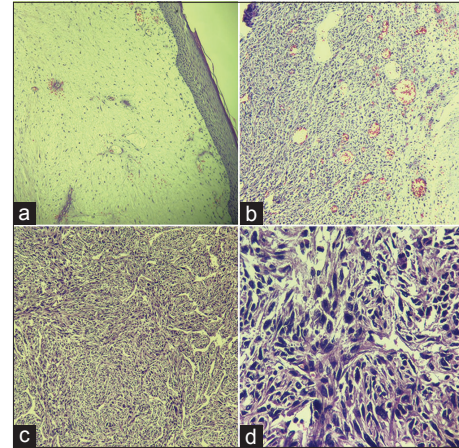


Figure 3: Histopathologic findings. (a) Dermatofibrosarcoma protuberans expands and infiltrates the dermis, while epidermis shows important thinning. H and E stain ×10. (b) Spindle cells with scant eosinophilic cytoplasm usually are centered on a small vessel. H and E stain ×10. (c) Classic storiform pattern: cells radiating in spokes at right angles around a central point that often contains a vessel. H and E stain ×10 (d) H and E ×100 magnification in which the storiform or cartwheel pattern can be better appreciated.

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How to cite this article: Sangrador M, Olvera JG, Ortiz VM. Dermatofibrosarcoma of the scalp. *Surg Neurol Int* 2019;10:221.