

CLINICAL IMAGE

Dermatofibrosarcoma protuberans of the scalp

Maha Al-Khattab  | Sharon Kennedy  | Deirdre Jones

Department of Plastic and Reconstructive Surgery, Galway University Hospital, Galway, Ireland

Correspondence

Sharon Kennedy, Department of Plastic and Reconstructive Surgery, Galway University Hospital, Newcastle Road, Galway, Ireland.
Email: sharonkennedy@rcsi.ie

Funding information

None

Abstract

Dermatofibrosarcoma protuberans is a rare entity. Due to its high propensity for local recurrence, knowledge of the appropriate management, both surgical and medical, is important for optimal patient outcomes.

KEYWORDS

dermatology, general surgery, oncology

A 57-year-old woman presented to a plastic surgery department with a large parieto-occipital lesion (Figure 1). The mass began as a purple papule 4 years ago and slowly enlarged. On examination, the lesion was a non-tender, firm, non-pulsatile soft tissue mass, which was not fixed to the underlying periosteum. She had no associated lymphadenopathy. She underwent an incisional biopsy which showed a tumor extensively replacing the dermis, composed of bland spindle cells with a focally storiform growth pattern. Immunohistochemistry stained diffusely for CD34, features in keeping with dermatofibrosarcoma protuberans (DFSP). Radiological staging showed no other disease. She successfully underwent wide excision and local flap reconstruction.

Dermatofibrosarcoma protuberans is a rare soft tissue tumor of mesenchymal origin, with low metastatic potential but a high propensity for local recurrence. Incidence rates are between 0.8 and 4.5 cases per million persons per year.¹ Chromosomal translocation leading to fusion of platelet-derived growth factor-beta polypeptide gene (PDGFB), chromosome 22 and collagen type 1A1 gene (COL1A1), chromosome 17 is present in over 90% of DFSP.² Recommended treatment is wide local excision. Adjuvant radiotherapy is recommended for unresectable



FIGURE 1 Large dermatofibrosarcoma protuberans of the scalp

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2022 The Authors. *Clinical Case Reports* published by John Wiley & Sons Ltd.

disease, positive margins, or in the setting of recurrence. Imatinib mesylate, a tyrosine kinase inhibitor, can be used for recurrent, unresectable, or metastatic disease.

ACKNOWLEDGEMENTS

None.

CONFLICTS OF INTEREST

None.

AUTHOR CONTRIBUTION

MA and SK drafted and reviewed the article. DJ reviewed the article.

ETHICAL APPROVAL

The regional Research Ethics Committee judged that this work was exempt from ethical review. Written patient consent was obtained for this publication.

CONSENT

Written informed consent was received from the patient for the use of her image and case details.

DATA AVAILABILITY STATEMENT

None.

ORCID

Maha Al-Khattab  <https://orcid.org/0000-0002-5450-9748>

Sharon Kennedy  <https://orcid.org/0000-0003-3813-2634>

REFERENCES

1. Allen A, Ahn C, Sanguenza O. Dermatofibrosarcoma protuberans. *Dermatol Clin*. 2019;37(1):483-488.
2. Miller S, Andersen J, Berg D. Dermatofibrosarcoma protuberans. *J Nail Compr Canc Netw*. 2012;10(3):312-318.

How to cite this article: Al-Khattab M, Kennedy S, Jones D. Dermatofibrosarcoma protuberans of the scalp. *Clin Case Rep*. 2022;10:e05703. doi:[10.1002/ccr3.5703](https://doi.org/10.1002/ccr3.5703)