Dermatology Practical & Conceptual

Basal Cell Carcinoma Overlying a Dermatofibroma: A Rare Collision Tumor

Sandra Jerkovic Gulin,[1] Davorin Loncaric,[2] Jaka Rados[2]

1 Department of Infectious Diseases, Dermatology, and Venereology, General Hospital Sibenik, Croatia
2 Department of Dermatology and Venereology, University Hospital Centre Zagreb, Croatia

Key words: basal cell carcinoma, dermatofibroma, dermoscopy, collision tumors, histopathology

Citation: Jerkovic Gulin S, Loncaric D, Rados J. Basal cell carcinoma overlying a dermatofibroma: a rare collision tumor. *Dermatol Pract Concept*. 2020;10(1):e2020015. DOI: https://doi.org/10.5826/dpc.1001a15

Accepted: October 1, 2019; **Published:** December 31, 2019

Funding: None.

Competing interests: The authors have no conflicts of interest to disclose.

Authorship: All authors have contributed significantly to this publication.

Corresponding author: Sandra Jerkovic Gulin, MD, Department of Infectious Diseases, Sibenik General Hospital, Stjepana Radića 83, 22221 Sibenik, Croatia. Email: sandrajerkovicgulin@gmail.com

Introduction

Dermatofibroma (DF) is one of the most frequent skin tumors. Several histopathological variants have been described, including fibrous histiocytoma (accounting for 80% of cases), aneurysmal, hemosiderotic, epithelioid, cellular, lipidized, atrophic, and clear cell variant. DF has slight female predominance and is mostly localized on the limbs. Eruptive DFs have been described in association with pregnancy and immunosuppression. In almost 80% of cases, the epidermis overlying DF shows changes that range from simple hyperplasia to the proliferation of basaloid cells, morphologically indistinguishable from basal cell carcinoma (BCC) [1]. We report a case of collision tumor consisting of DF and BCC.

Case Presentation

A 56-year-old woman presented with a papulonodular, erythematous, partially pigmented lesion, 18 × 8 mm in size, on her right thigh (Figure 1A). The lesion was firm on palpation, revealing a pinch (dimple) sign. Dermoscopy revealed 2 parts of the tumor, a pale pink amorphous area with white areas and blue-gray ovoid nests, specks of pigment, and spoke-wheel pigmentation (Figure 1B). The tumor was surgically removed. Histopathology confirmed 2 different parts of the lesion (Figure 1, C and D), 1 encapsulated in the dermis consisting of mixture of fibroblasts and histiocytes arranged between collagen fibers (DF) and the other, under the overlying acantholytic epidermis, a dermal tumor consisting of islets of atypical basaloid cells forming a palisading pattern at the periphery (BCC).

Conclusions

Only several cases of BCC overlying DF have been reported in the literature [2]. We may assume, as have other authors, that basaloid proliferations (basal cell-like changes) and BCCs (true neoplastic lesions) are a result of the inductive

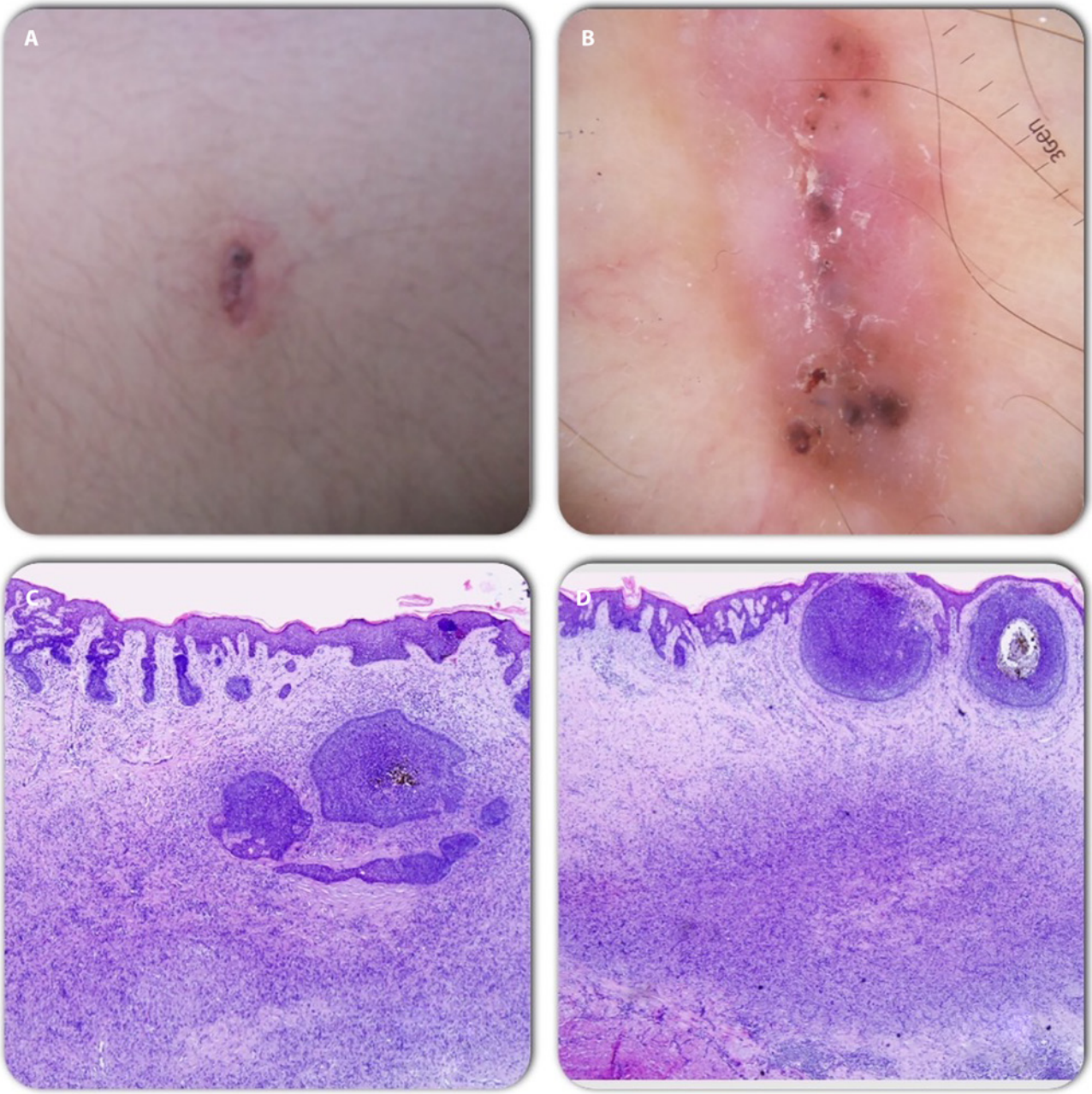

Figure 1. (A) Clinical view: papulonodular, erythematous, partially pigmented lesion, 18 × 8 mm on the right thigh. (B) Dermoscopic view: 2 parts of the tumor, a pale pink amorphous area with white areas and blue-gray ovoid nests, specks of pigment, and spoke-wheel pigmentation. (C,D) Histopathology: 1 part of the lesion is encapsulated in the dermis consisting of a mixture of fibroblasts and histiocytes arranged between collagen fibers (dermatofibroma) and the other, under the overlying acantholytic epidermis, a dermal tumor consisting of islets of atypical basaloid cells in a palisading pattern at the periphery (basal cell carcinoma) (H&E, ×20).

effect of DF and its fibrohistiocytic proliferation on the epithelial cells of the hair follicle [2]. This letter highlights the importance of dermoscopy and dermoscopic criteria in collision lesions in order not to miss skin cancer and gives a dermoscopic/histopathological description of a BCC and DF in a collision lesion.

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