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(CASE REPORT)

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GIANT PIGMENTED FIBROEPITHELIOMA OF PINKUS MIMICKING MALIGNANT MELANOMA: A DIAGNOSTIC PITFALL

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ABSTRACT

Background: Fibroepithelioma of Pinkus (FeP) is an uncommon fibroepithelial tumor traditionally regarded as a variant of basal cell carcinoma. Pigmented and giant forms are rare and may clinically and dermoscopically mimic malignant melanoma, creating a significant diagnostic challenge.

Case Presentation: We report the case of a 45-year-old man presenting with a 5 cm, slow-growing, sessile, partially ulcerated pigmented tumor on the lower back. Dermoscopy revealed shiny white streaks and extensive structureless blackish pigmentation, raising strong suspicion of malignant melanoma. A complete excisional biopsy was performed. Histopathological examination demonstrated thin, anastomosing strands of basaloid cells forming a fenestrated network embedded in a loose fibrovascular stroma, consistent with giant fibroepithelioma of Pinkus. Surgical margins were free of tumor. No recurrence was observed after three years of follow-up.

Conclusion: Pigmented and giant variants of FeP can closely simulate melanoma both clinically and dermoscopically. Histopathological examination of a completely excised specimen remains the diagnostic gold standard. Awareness of this entity is essential to avoid misdiagnosis while ensuring appropriate excisional management of suspicious pigmented lesions.

Keywords: Fibroepithelioma of Pinkus; Basal cell carcinoma; Malignant melanoma; Dermoscopy; Pigmented skin tumor; Case report

1 INTRODUCTION

Fibroepithelioma of Pinkus (FeP) is an uncommon cutaneous neoplasm first described in 1953 as a “premalignant fibroepithelial tumor of the skin” [1]. It has traditionally been classified as a variant of basal cell carcinoma (BCC). However, its indolent biological behavior, distinctive fenestrated architecture, and immunohistochemical characteristics have led some authors to consider it a benign follicular neoplasm closely related to trichoblastoma [2,3].

Clinically, FeP typically presents in middle-aged or elderly patients as a solitary, slow-growing, flesh-colored papule, plaque, or nodule, most commonly located on the trunk, particularly the lumbosacral region [4,5]. Because of its nonspecific appearance, it is frequently misdiagnosed as a benign lesion such as a skin tag, dermal nevus, or seborrheic keratosis [4,6].

Pigmented and giant variants are rare [6,7]. When pigmentation is present, dermoscopic features may overlap with those of malignant melanoma, including structureless pigmentation and negative network patterns [7–9]. We report a giant, pigmented, partially ulcerated FeP that clinically and dermoscopically mimicked melanoma.

1.1 Case Presentation

A 45-year-old man presented with a three-year history of a slowly enlarging lesion on his lower back. He had no personal or family history of skin cancer and no significant comorbidities. His skin phototype was IV. The lesion was asymptomatic except for occasional bleeding.

Clinical examination revealed a well-demarcated, sessile tumor measuring approximately 5 cm in greatest diameter. The lesion was firm, markedly pigmented, and partially ulcerated (Figure 1). No regional lymphadenopathy was detected.

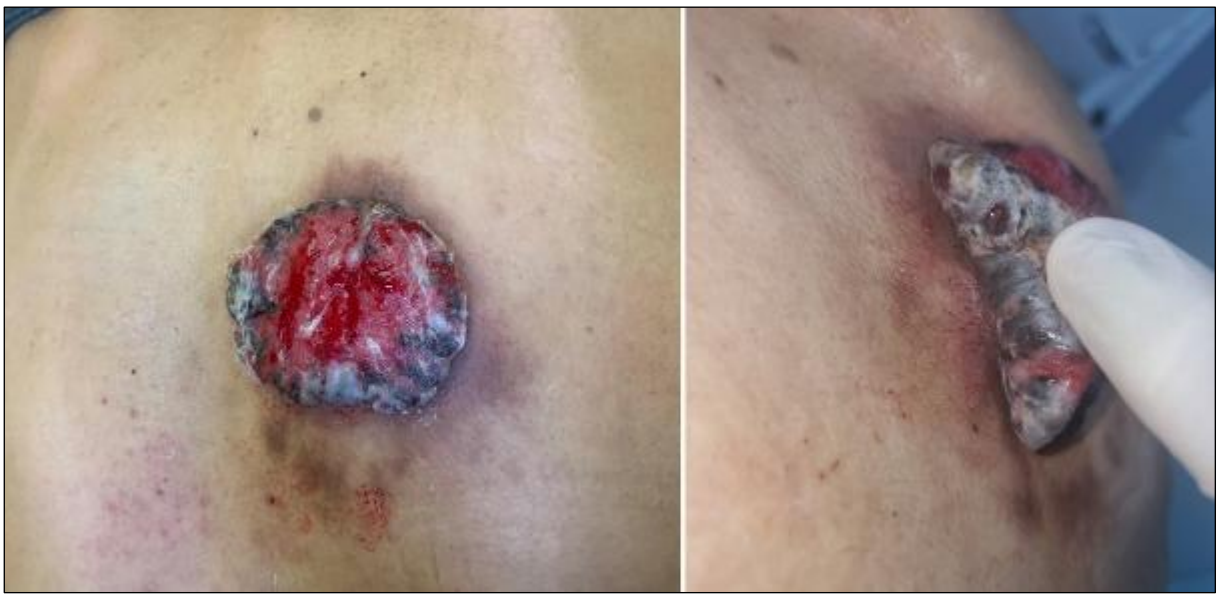

Figure 1: Clinical image: large, sessile, partially ulcerated, significantly pigmented tumor of the back, approximately 5 cm in diameter.

Dermoscopy demonstrated shiny white streaks (chrysalis structures), extensive structureless blackish pigmentation, and ulceration (Figure 2). Based on these findings, malignant melanoma was considered the primary diagnosis, with pigmented BCC as a differential.

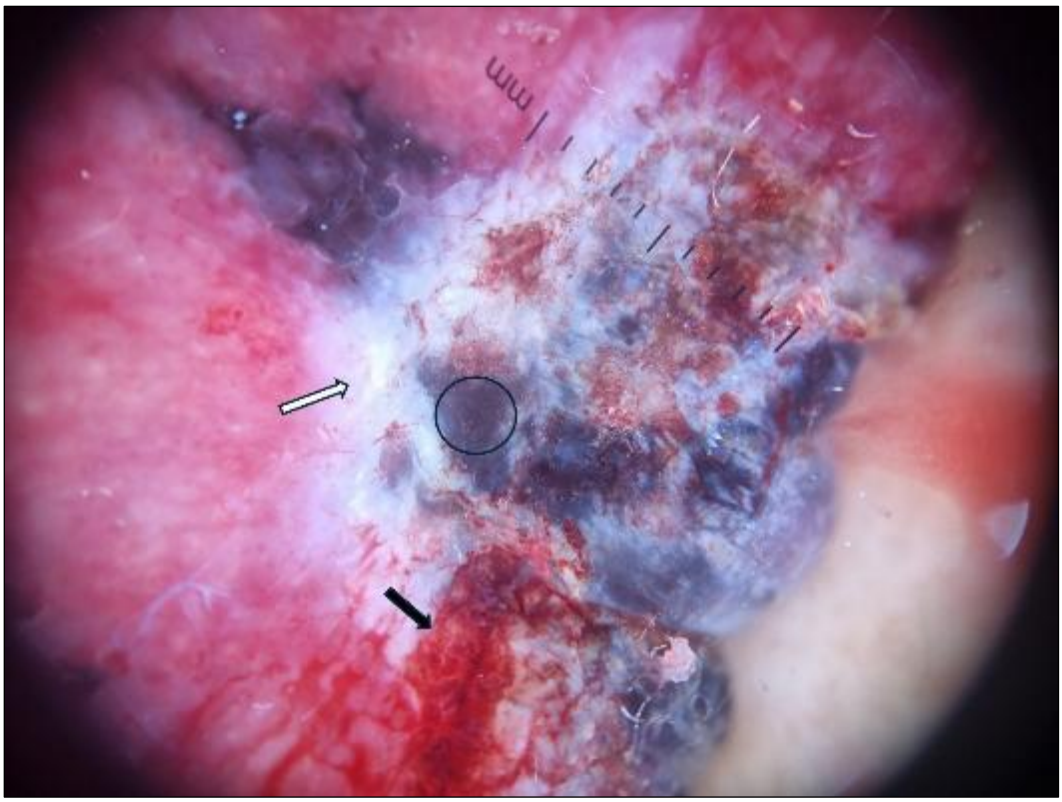

Figure 2: Dermoscopic image: shiny white streaks (white arrow), structureless pigmentation (circle) and ulceration (black arrow)

A complete excisional biopsy was performed. Histopathological examination showed thin, branching, anastomosing cords of basaloid cells forming a fenestrated network extending from the epidermis into the dermis within a loose fibrovascular stroma (Figure 3).

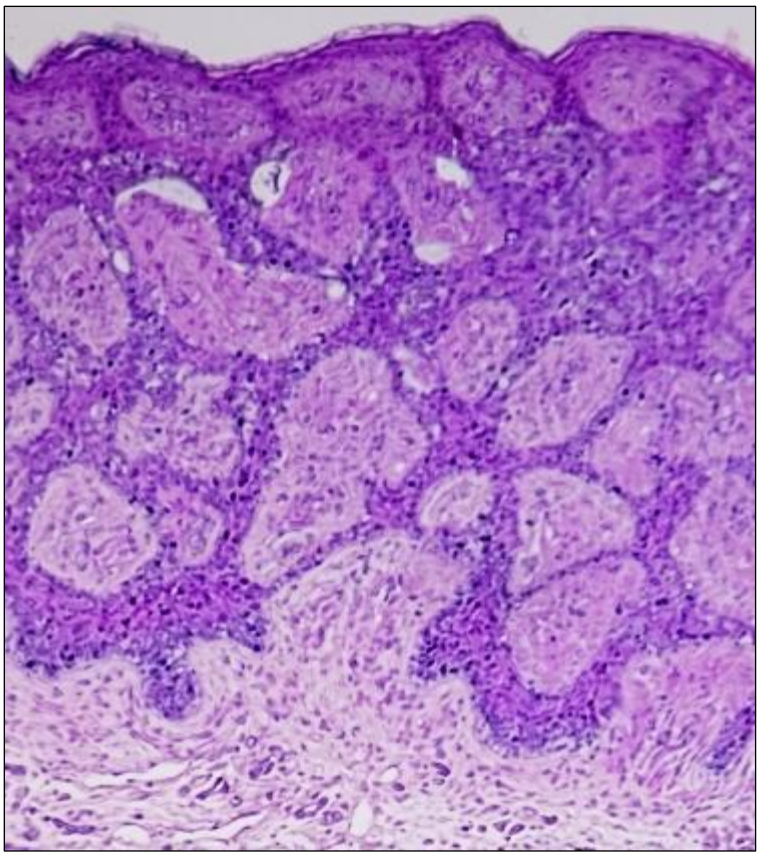

Figure 3: Histopathology (hematoxylin and eosin, ×200): anastomosing strands of basaloid cells forming a fenestrated network within a loose fibrovascular stroma, consistent with fibroepithelioma of Pinkus. without cytological atypia or melanocytic proliferation.

No melanocytic proliferation or cytological atypia suggestive of melanoma was observed. Surgical margins were tumor-free. These findings confirmed the diagnosis of giant fibroepithelioma of Pinkus.

The postoperative course was uneventful. No recurrence was observed during three years of clinical follow-up.

2 DISCUSSION

FeP accounts for a small proportion of BCC-related tumors [4,5]. Although traditionally considered a BCC variant, some authors classify it as a fenestrated trichoblastoma due to its architectural and immunohistochemical features [2,3]. Regardless of classification, its biological behavior is indolent with excellent prognosis.

The principal diagnostic challenge in this case was its resemblance to malignant melanoma. Pigmented FeP may demonstrate structureless gray-brown or black areas, blue-gray dots, and negative network patterns on dermoscopy, overlapping with melanoma criteria [7–9]. In our patient, lesion size, ulceration, and intense pigmentation reinforced suspicion of melanoma.

Shiny white streaks observed under polarized dermoscopy correspond histologically to dermal fibrosis and altered collagen. Although frequently described in FeP [4], they are nonspecific and may also be seen in melanoma, BCC, and dermatofibroma.

Histopathology remains the diagnostic gold standard [1,2,4]. The characteristic fenestrated network of basaloid strands within a fibrovascular stroma, without melanocytic proliferation, distinguishes FeP from melanoma. Complete surgical excision is curative, and recurrence is rare when margins are clear [4,5].

3 CONCLUSION

Pigmented and giant fibroepithelioma of Pinkus may closely mimic malignant melanoma both clinically and dermoscopically. This case highlights the importance of complete excisional biopsy for suspicious pigmented lesions. Histopathological examination remains essential for definitive diagnosis and appropriate management.

STATEMENTS ON COMPLIANCE WITH ETHICAL STANDARDS

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Disclosure of conflict of interest

The authors declare that there is no conflict of interest regarding the publication of this article.

Statement of informed consent

Written informed consent was obtained from the patient for publication of this case report and accompanying images. Institutional ethical approval was not required for a single case report according to local regulations.

REFERENCES

[1] Pinkus H. Premalignant fibroepithelial tumors of skin. AMA Arch Derm Syphilol. 1953;67:598–615.

[2] Bowen AR, LeBoit PE. Fibroepithelioma of Pinkus is a fenestrated trichoblastoma. Am J Dermatopathol. 2005;27:149–154.

[3] Sellheyer K, Nelson P, Kutzner H. Fibroepithelioma of Pinkus is a true basal cell carcinoma developing in association with a newly identified tumour-specific type of epidermal hyperplasia. Br J Dermatol. 2012;166:88–97.

[4] Zalaudek I, Ferrara G, Broganelli P, Moscarella E, Mordente I, Cerroni L, et al. Dermoscopy patterns of fibroepithelioma of Pinkus. Arch Dermatol. 2006;142:1318–1322.

[5] Su MW, Fromer E, Fung MA. Fibroepithelioma of Pinkus. Dermatol Online J. 2006;12:2.

[6] Reggiani C, Zalaudek I, Piana S, Longo C, Argenziano G, Lallas A, et al. Fibroepithelioma of Pinkus: case reports and review of the literature. Dermatology. 2013;226:207–211.

[7] Akay BN, Kirmizi A, Demirdag HG, Erdem C, Okcu Heper A. Heavily pigmented fibroepithelioma of Pinkus mimicking melanoma. Int J Dermatol. 2018;57:753–754.

[8] Gómez-Martín I, Moreno S, Pujol RM, Segura S. Pigmented fibroepithelioma of Pinkus: a potential dermoscopic simulator of malignant melanoma. J Dermatol. 2017;44:542–543.

[9] Yonan Y, Maly C, DiCaudo D, Mangold A, Pittelkow M, Swanson D. Dermoscopic description of fibroepithelioma of Pinkus with negative network. Dermatol Pract Concept. 2019;9:246–247.