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Acral amelanotic melanoma

Melanoma amelanótico acral

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ABSTRACT

Acral amelanotic melanoma is rare and can mimic many entities, such as eccrine poroma, squamous cell carcinoma, plantar wart, and chronic ulcers. Due to the variety of possible differential diagnoses, it is a challenging and frequently late diagnosis. Dermoscopy features can help in early diagnosis. The dermatologist should keep this diagnosis in mind when faced with a pink, progressively growing, irregularly shaped lesion, mainly if located on the hands and feet.

Keywords: Dermoscopy; Melanoma amelanotic; Skin neoplasms; Oncology; Foot ulcer

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RESUMO

O melanoma amelanótico acral é raro e pode mimetizar muitas entidades, como poroma écrino, carcinoma de células escamosas, verruga plantar e úlceras crônicas. Devido a esta variedade de possíveis diagnósticos diferenciais, é um diagnóstico difícil e, muitas vezes, tardio. As características da dermatoscopia podem ajudar no diagnóstico precoce. O clínico deve ter esse diagnóstico em mente ao se deparar com uma lesão rosada, de crescimento progressivo e formato irregular, principalmente se localizada nas mãos e nos pés.

Palavras-chave: *Dermoscopia; Melanoma Amelanótico; Neoplasias Cutâneas; Oncologia; Úlcera do Pé*

Case report

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INTRODUCTION

Amelanotic melanoma is a subtype of cutaneous melanoma that shows no or little amount of pigment at macroscopy, dermoscopy, and histology.

Approximately 2-8% of melanomas are amelanotic. The final diagnosis is usually late due to the delay in identifying signs of malignancy.[1] Dermoscopy is an essential tool for anticipating these findings, allowing early suspicion, biopsy, and treatment. We present a case of acral amelanotic melanoma with typical dermoscopic findings, and we highlight the importance of the diagnostic suspicion.

CASE REPORT

A 74-year-old man came to the Dermatology Outpatient Clinic complaining of a tumor in the right plantar region with five months of evolution. He was being followed up at the Basic Health Unit due to the hypothesis of chronic vascular ulcer. However, as the lesion showed growth and local pain, he was referred to the Dermatology Specialty Center. Dermatological examination revealed an oval-shaped ulcerated tumor in the right plantar region, with well-defined and elevated edges, and no signs of secondary infection (Figure 1). Dermoscopic examination showed a milky-red background, with vascular polymorphism combining dotted vessels and irregular linear vessels, and the presence of textile fibers (Figure 2). We referred the patient for an excisional biopsy of the lesion. The histopathology revealed the epidermis with hyperplasia, irregular acanthosis, and hyperkeratosis (Figure 3A), in addition to the presence of the pagetoid component (Figure 3B), mitoses, and lentiginous aspect of the lesion (Figure 3C). Immunohistochemistry was positive for MELAN-A (Figure 3D) and HMB-45 (Figure 3E), concluding that it was an amelanotic malignant melanoma, with a Breslow index of 8.6 mm.

The patient was referred to the Oncology Service of the municipality for staging and margin expansion. The investigation evidenced the presence of pulmonary and inguinal lymph node metastases. Clinical treatment with carbo-taxol was started, but the patient did not tolerate it and died seven months after the diagnosis of the lesion.

DISCUSSION

Amelanotic melanoma can be divided into two subtypes according to the clinic and dermoscopy of the lesions: "true" and hypomelanotic. True amelanotic melanoma does not show pigment either clinically or on dermoscopy. Some authors even add histology, with less than 5% of tumor cells with melanin. Hypomelanotic melanoma has no pigment in the clinic but shows small pigmented areas on dermoscopy.[2]

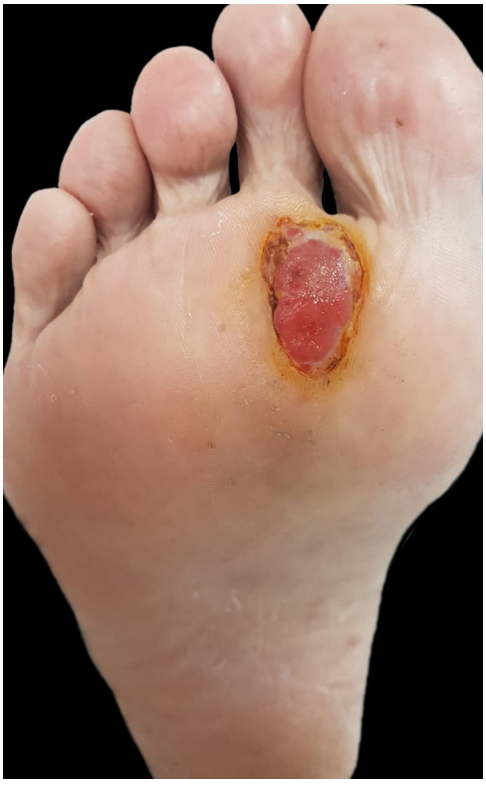

Figure 1: Ulcerated lesion on plantar region, oval in shape, well-defined borders.

Figure 2: Dermoscopy with a milky-red background, vascular polymorphism, combining dotted vessels and irregular linear vessels, and presence of textile fibers.

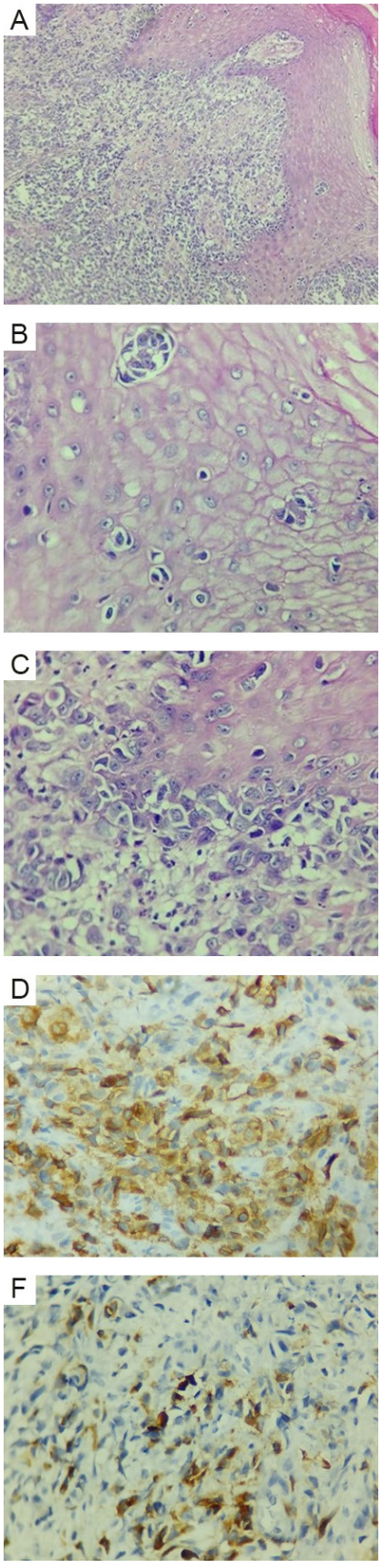

Figure 3:
A - Epidermis with hyperplasia, irregular acanthosis, and hyperkeratosis (Hematoxylin & eosin, 10x).
B - Pagetoid component (Hematoxylin & eosin, 40x).
C - Lentiginous appearance (Hematoxylin & eosin, 40x).
D - Positive immunohistochemistry for MELAN-A.
E - Positive immunohistochemistry for HMB-45.

Any subtype of cutaneous melanoma can be amelanotic, but it is more common in subungual (25%) and desmoplastic melanoma. The literature suggests three primary clinical forms of amelanotic melanoma: erythematous macula with epidermal changes, which occurs more commonly in photoexposed areas; normochromic dermal plaque without epidermal changes; and papular-nodular form, responsible for 58% of cases of amelanotic melanoma.[3]

In the absence of pigment, vascularization helps in the dermoscopic examination of amelanotic melanoma. Dermoscopy is difficult because the vessels may disappear depending on the pressure placed between the dermoscope and the lesion.[4] In general, there are six vascular patterns: dotted vessels, comma vessels, regular or irregular linear vessels, glomerular vessels, hairpin-like vessels, and arboriform vessels.[5]

The literature considers as dermoscopic features with the highest positive predictive value for suspected melanoma the presence of brown spots or globules of irregular size or distribution, multiple blue-grey spots, irregular depigmentation, blue--white veil, more than one shade of pink, milky-red areas, vessels mainly in the central region of the lesion, vascular polymorphism combining mainly dotted, irregular linear, and hairpin-like vessels. Some additional criteria are white areas of regression, ulceration, white structures, and inverted network.

On the other hand, characteristics with the highest negative predictive value for melanoma are more than three milia-like cysts, the predominance of comma-shaped vessels in the lesion, and arboriform vessels only.[6,7,8]

In the case reported, the initial diagnostic hypothesis of the primary care physician was a chronic ulcer with a probable vascular origin, which is one of the differential diagnoses of plantar ulcers, as well as plantar warts, eccrine poroma, plantar perforating ulcer, squamous cell carcinoma (SCC), and acral melanoma. The dermoscopic examination allowed assessing the characteristics suggestive of amelanotic melanoma and provided the best possible follow-up for the case, which emphasizes the importance of the dermatologist in the evaluation of skin lesions for the early diagnosis of potential malignancies, as well as the relevance of dermoscopic examination knowledge to increase the specialist's diagnostic accuracy.

CONCLUSION

Amelanotic melanoma is a rare condition; however, it has a high mortality rate, mainly due to late diagnosis. The dermoscopic examination has become an essential ally to anticipate the diagnosis of these lesions and improve the prognosis. The presence of vascular polymorphism and milky-red background in a pink lesion should raise suspicion of malignancy and prompt biopsy. ●

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