Which is the melanoma? Black lesion matters!

Qual é o melanoma? Lesões negras são importantes!

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ABSTRACT

Diagnosing basal cell carcinomas, both clinically and dermoscopically, is part of most dermatologists' daily routine. However, tumors of this lineage, when densely pigmented, can be a challenge for the physician and surgeon. Dermoscopic features typical of melanocytic lesions may be present in these carcinomas, and the similarity with melanoma results in a real dilemma. More in-depth knowledge on this topic can make a difference in the management of these cases.

Keywords: Carcinoma, Basal cell; Dermoscopia; Diagnosis; Melanoma

RESUMO

Diagnosticar carcinomas basocelulares por meio da clínica e dermatoscopia faz parte da rotina diária da maioria dos dermatologistas. No entanto, tumores dessa linhagem, quando densamente pigmentados, podem representar um desafio para o médico e cirurgião. Características dermatoscópicas típicas de lesões melanocíticas podem estar presentes nestes carcinomas e a similaridade com o melanoma resultar num verdadeiro dilema. Conhecimentos mais aprofundados sobre este tema podem fazer diferença no manejo destes casos.

Palavras-Chave: Carcinoma basocelular; Dermoscopia; Diagnóstico; Melanoma

Imaging Diagnosis

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INTRODUCTION

A relevant success factor for oncologic treatment of pigmented skin lesions is based on precise initial diagnosis. Clinical differentiation between densely pigmented basal cell carcinomas (BCCs) and certain melanomas can be challenging.¹⁻³ Dermoscopic examination allows identifying different skin neoplasms and greatly assists the clinician in making the proper decision. Different dermoscopic structures for diagnosis of BCC have been described.¹⁻⁴ However, the absence of typical BCC characteristics or the presence of characteristic patterns of melanoma can lead to a mistaken diagnosis. This occurs more frequently in cases of densely pigmented BCCs, as demonstrated by Altamura et al.² The authors, analyzing 609 BCCs, identified dermoscopic characteristics of melanocytic lesion in 40.6% of these tumors, predominant in those with greater intensity of pigment, and concluded that densely pigmented BCCs were the most difficult type to differentiate from melanoma.² Since densely pigmented lesions are more common in individuals with higher photo types, careful analysis of these cases is relevant in tropical and subtropical populations. In this case series, we present five patients with densely pigmented lesions, raising the diagnostic challenge of melanoma hidden in four BCCs.



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DISCUSSION

This series of five pigmented lesions shows that the differential diagnosis of pigmented BCC or melanoma is not always immediately evident, even with dermoscopy.¹

This series includes two cases of BCC (1 and 5) that are

reminiscent of nodular melanoma. The dark coloring associated with a bluish veil is typical of melanoma, while the absence of specific characteristics of melanocytic lesions and black color (rule BB negative 5), and presence of spoke wheel and bluish



CASE 1 – Densely pigmented basal cell carcinoma: grayish-blue ovoid niches (N), multiple grayish-blue globules (G), areas without shiny reddish-white structure (W), multiple small erosions (E), thin, short telangiectasias (F), spoke wheel areas (S), non-arboriform telangiectasias (NT), absence of pigmented network.



CASE 2 – Pigmented basal cell carcinoma: arboriform vessels (A), radial streaks or pseudopods (P), grayish-blue ovoid niches (N), areas without shiny reddish-white structure (W), spoke wheel areas (S), multiple small erosions (E), non-arboriform telangiectasias (NT), maple leaf areas (M), absence of pigmented area



CASE 3 – Heavily Pigmented Basal Cell Carcinoma: Blue/white veillike structures (V), multiple small erosions (E), ulceration (U), blue-gray ovoid nests (N), radial streamingor pseudopods (P), no pigmented network.



CASE 4 - Extensive superficial in situ melanoma: bluish white veil (V), radial streaks or pseudopods (P), atypical network (AN), atypical globules (AG).

ovoid niches, respectively, were suggestive of BCC.

The other three lesions present peripheral structures (similar to radial streaks and pseudopods)⁶ at first sight. On more careful analysis, peripheral structures of melanoma (case 4) end in a bulbous projection (drumstick-like) compared to the BCCs (cases 2 and 3), which only present radial linear extensions. Besides, in the context of melanoma, some globules may be confused with bluish ovoid niches due to the blue color, but others clearly suggest melanocytic proliferation due to the dark blackish-brown color, resulting from the upward dissemination of melanocytic niches and clusters of Pagetoid cells.⁷

Differential diagnosis in these cases is obviously not always easy, and patients with high photo type require detailed examination, always with dermoscopy to enhance the differential diagnosis. This difficulty occurs mainly in the differentiation of densely pigmented BCCs.² Especially in this subtype, the presence of dermoscopic characteristics suggestive of melanocytic lesion can reach 80%.² Patterns including bluish-white veil and



CASE 5

Densely pigmented basal cell carcinoma, similar bluish-white veil (V) Grayish-blue ovoid niches (N), grayishblue globule (G), radial streaks or pseudopods (P), areas without black colored structure (B), absence of pigmented network.

multiple black and blue globules are among the most frequent findings. $^{\rm 2}$

Thus, in densely pigmented BCCs, careful recognition of the clinical morphology and dermoscopic aspects can increase the diagnostic accuracy. We also propose that other imaging methods, such as confocal reflectance microscopy, which has proven useful in this context,8 can greatly assist the diagnosis of skin cancer in patients with high photo types.

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