Dermoscopy of pigmented lesions of the face: a diagnostic challenge

Dermatoscopia das lesões pigmentadas na face: um desafio diagnóstico

Diagnostic imaging

ABSTRACT

Dermoscopy of lentigo maligna on the face has reliable and well-tested parameters for its diagnosis. However, some benign lesions such as pigmented actinic keratoses have dermoscopic aspects that are common in malignant lentigo, making the correct diagnosis difficult. This fact often leads to unnecessary excisions of benign lesions. The present article discusses these morphological parameters in light of the dermoscopic analysis of the commonalities between lentigo maligna and pigmented actinic keratosis, also touching upon the aspects already described for the diagnosis of pigmented actinic keratoses.

Keywords: Dermoscopy; Hutchinson's melanotic freckle; keratosis, actinic; face.

RESUMO

A dermatoscopia do lentigo maligno na face tem parâmetros confiáveis e bem testados para sua diagnose. Algumas lesões benignas, como as queratoses actínicas pigmentadas, apresentam, contudo, aspectos dermatoscópicos comuns aos lentigos malignos, dificultando a correta diagnose. Isso muitas vezes leva a excisões desnecessárias de lesões benignas. Este artigo discute esses parâmetros morfológicos no escopo de analisar os pontos em comum entre lentigo maligno e queratose actínica pigmentada com a dermatoscopia, assim como coteja os aspectos já descritos para a diagnose das queratoses actínicas pigmentadas.

Palavras-chave: *dermoscopia; sarda melanótica de Hutchinson; ceratose actínica; face.*

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INTRODUCTION

Dermatoscopic examination of pigmented lesions on the face differs from usual dermoscopy due to the absence of a pigmented network at this location. Instead, it observes a pseudo-network, and also there are some well-established parameters for the diagnosis of lentigo maligna (LM) in the face.[1] (Table 1) Pigmented actinic keratoses (PAK) on the face are usually a diagnostic pitfall in the differentiation of LM. The present article describes some cases of dermoscopic images of doubtful PAKs with LM findings, as well as typical LM and PAK findings, which may be of assistance in the differential dermoscopic diagnosis.

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Table 1: Dermoscopic findings of lentigo maligna 1
Asymmetrically pigmented follicular openings
Dark rhomboidal structures (brown or black)
Slate-gray globules
Slate-gray dots

COMMENTS

Both the LM (Figure 1) and the PAK (Figure 2) may have the same appearance, except for the dark blurs.[2] The literature has described dermoscopic parameters that suggest the diagnosis of PAK rather than that of LM, with a rougher surface, due to hyperkeratosis associated with this type of lesion, the presence of multiple lesions (sign of the surroundings), a more regular architecture of the dots, hypodense holes in the pseudonetwork or the "strawberry" pattern (Figure 3).[3-5] These aspects of the PAK have already been tested for their diagnostic validity against LM,[4,5] with a prominent "strawberry" pattern found in the PAK, but not in the LM.[4] Given that the dermoscopy consensus establishes that a single dermoscopic parameter does not allow diagnosis, it only has the potential for assisting in diagnosis. The examples of PAK described in the present article (Figure 2) indicate that the rough surface is not always present. The sign of the surroundings takes into account the fact that other keratotic lesions may be seen in the face with actinic damage, helping in the identification of the suspicious lesion, although malignant lentigines can be found in actinic skin. When the PAK does not have pigmented areas, (Figure 2) the presence of classical aspects of actinic keratosis can be of help (hyperkeratosis, reddened areas and the "strawberry" characteristic), however reddened areas arranged in rhomboidal layout around the follicle should raise suspicion of the LM diagnosis, as it has been described more recently.[4] The pigmentary patterns described for the dermatoscopic diagnosis of LM 1 (Table 1) have been published with diagnostic accuracy,[3-5] and therefore can provide guidance for the choice of the site to be biopsied in case of the suspicion of malignancy, however those patterns can be found in

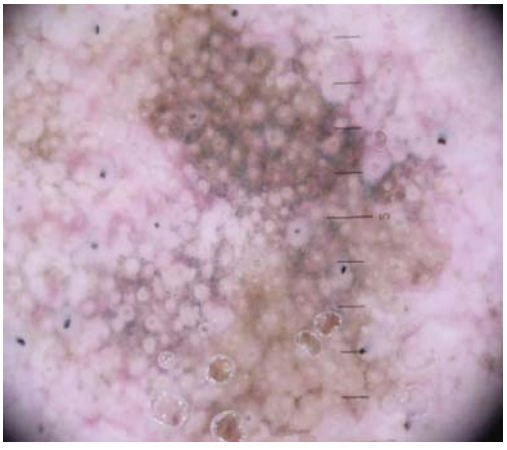
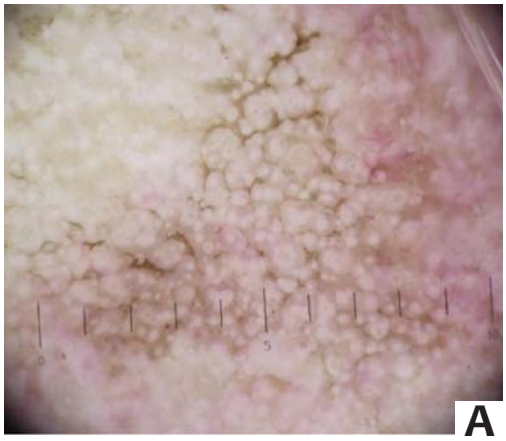
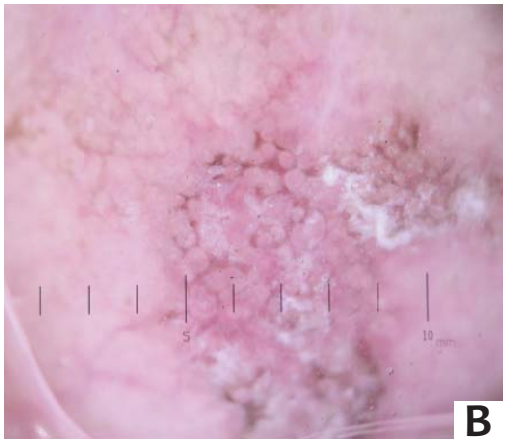
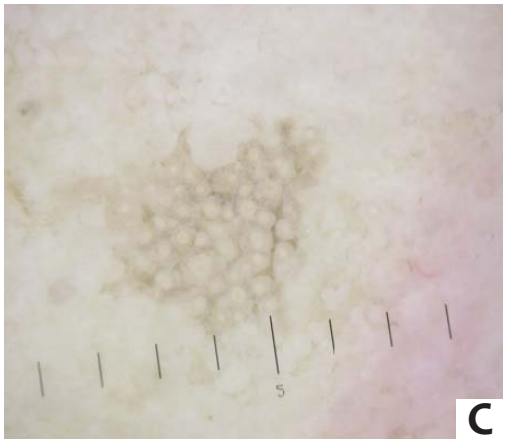


Figure 1: Lentigo maligna: 1 lesion with rhomboidal structures, annular pattern granular, pigmented follicular openings, assimetrical dots and slate-gray-globules







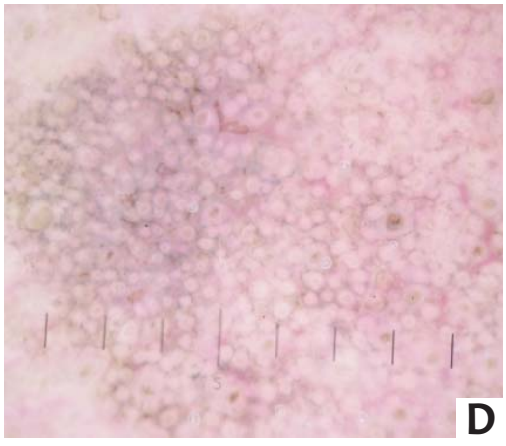


Figure 2: Pigmented actinic keratosis with dermatoscopic patterns similar to those of lentigo maligna: **A.** Rhomboid pattern; **B.** Rhomboid pattern and asymmetrical pigmented follicular openings; **C.** Asymmetrically pigmented follicular openings, annular-granular pattern and slate-gray dots; **D.** Asymmetrically pigmented follicular openings, annular-granular pattern and slate-gray dots.

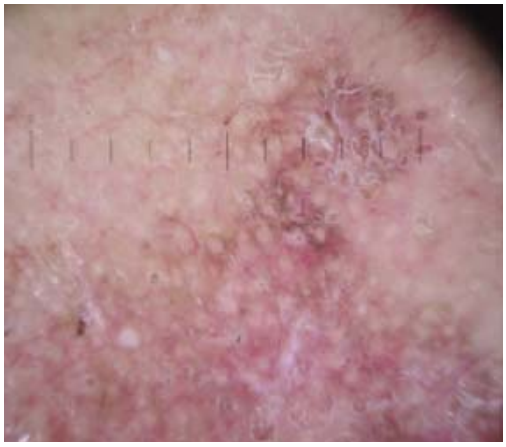


Figure 3: Pigmented actinic keratosis. This lesion shows typical patterns of actinic keratoses, such as the "strawberry" pattern (reddened areas with centers of follicles spared from involvement) as well as a roughsurface,in addition to patterns that resemble lentigo maligna, such as asymmetrically pigmented follicle openings, annular-granular pattern and slate-gray dots.

PAK (Figure 2). The examples presented show that the annular-granular pattern, as well as the slate-gray dots and globules, are possible in PAK (Figures 2 and 3). In this manner, a more regular distribution of dots and the absence of follicular openings asymmetrically pigmented are parameters that aid in the definition of PAK.[5] The presence of asymmetrical openings, however, does not exclude the possibility of PAK, in which case the biopsy will define the diagnosis.

CONCLUSIONS

Pigmented lesions on the face present a diagnostic pitfall when it is necessary to exclude the diagnostic possibility of LM—in particular because this diagnosis has dermoscopic aspects in common with PAK, leading to unnecessary biopsies. Both lesions can be found in all areas of the face, and their distribution is similar.[5] Thus, further studies are needed to validate the parameters for differentiating between PAK and LM. To date, in those cases, a skin biopsy remains the gold standard and is mandatory in order to exclude malignancy. ●

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