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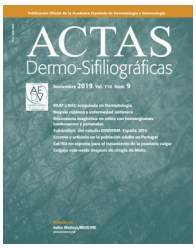

PRACTICAL DERMOSCOPY

# [Translated article] Rainbow Pattern: Key Potential or Distraction in the Diagnostic Dermoscopy

## Patrón arcoíris: potencial clave o distractor en el diagnóstico dermatoscópico

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## Case report

A 45-year-old man, with no relevant past medical history consulted for an asymptomatic lesion on his back of indeterminate history, which he noticed 1 month earlier due to occasional bleeding (Fig. 1).

**Figure 1** Physical examination and lesion location.

The physical examination confirmed the presence of a 1 cm in diameter pink, well-demarcated, friable, and partially eroded tumor nodule located in the left scapular area (Fig. 2).

**Figure 2** Patient's lesion. A 1 cm diameter pink, well-demarcated, friable, and partially eroded papule located on the left scapula.

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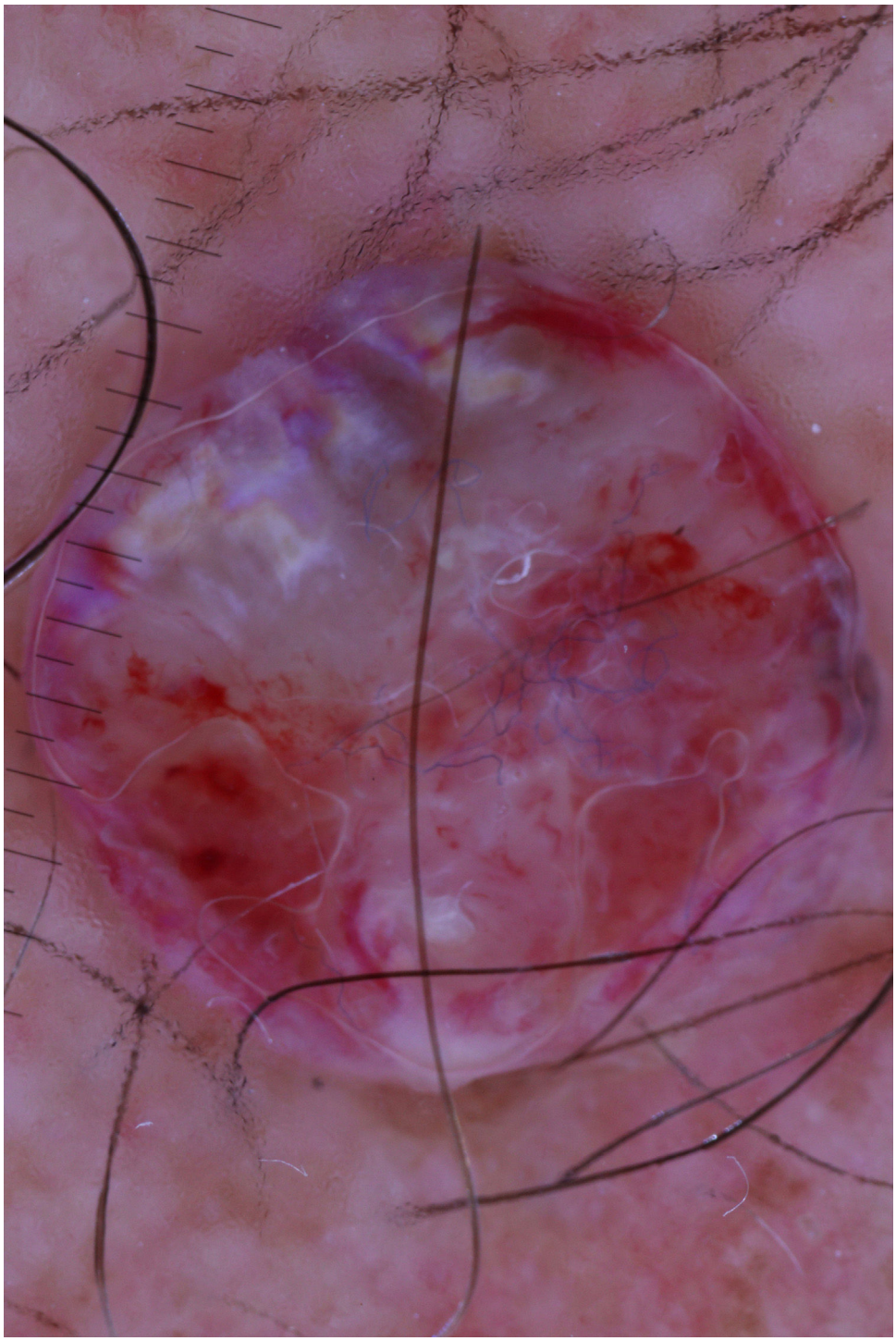

**Figure 3** Dermoscopy. A rainbow pattern can be seen in the upper region, red-white areas, hemorrhagic zones in the central part, and small areas of bluish-gray ovoid nests on the right lateral margin.

What is your diagnosis?

## Commentary

The dermoscopic image of the lesion revealed a rainbow pattern in the upper region, red-white areas and hemorrhagic zones in the central part, and small areas formed by bluish-gray ovoid nests on the right lateral margin (Fig. 3).

Given the lesion progression timeframe and dermoscopic findings, the following diagnoses were considered: amelanotic melanoma, Merkel cell tumor, atypical fibroxanthoma, pyogenic granuloma, squamous cell carcinoma, or basal cell carcinoma (BCC).

Histopathological analysis of the sample provided a definitive diagnosis of macronodular basal cell carcinoma (BCC).

The rainbow pattern was initially described in Kaposi's sarcoma lesions.[1] Subsequently, it has also been noted in other tumors such as atypical fibroxanthoma, pseudolymphoma, hemosiderotic dermatofibroma, blue nevus, and BCC.[2] This pattern likely results from a phenomenon related to luminescence and the interaction of light with the superficial and/or deep structural components of a lesion. Each polarization state undergoes variable absorption and refraction delay, resulting in a unique combination of colors for each lesion. However, further studies are still needed to understand the underlying optics of this phenomenon and evaluate its potential diagnostic relevance.[3]

In the case of BCC, a study on the dermoscopic variability of BCC based on clinical type and tumor location found the rainbow pattern in 5% of the 501 BCCs analyzed, mostly associated with nodular BCC.[4] Additionally, an Indian cohort that analyzed the relationship between dermoscopic patterns and the clinical or histopathological subtype of BCC in patients with phototypes IV–VI, this pattern was reported in a higher percentage – up to 24% of the 143 BCCs analyzed, with an increased frequency of 34% in the nodular BCC subgroup.[5]

Although its prognostic value is still uncertain, a recent study indicated that this pattern was a dermoscopic sign found exclusively in tumors unresponsive to imiquimod.[6]

## Conflicts of interest

None declared.

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