# Dermatoscopic findings in telangiectasia macularis eruptiva perstans<sup>\*</sup>

Achados dermatoscópicos na telangiectasia macular eruptiva perstans

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**Abstract:** Telangiectasia macularis eruptiva perstans is a rare form of cutaneous mastocytosis, characterized by the presence of erythematous or yellowish-brown macules with telangiectasias, preferably located on the trunk and upper limbs. We have described a case of telangiectasia macularis eruptiva perstans focusing on the dermoscopic characteristics of this disease.

Keywords: Cutaneous mastocytosis; Dermoscopy; Diagnosis; Mastocytosis

Resumo: A telangiectasia macular eruptiva perstans é uma forma rara de mastocitose cutânea, caracterizada pela presença de máculas eritematosas ou castanho-amareladas com telangiectasias, localizadas preferencialmente no tronco e membros superiores. Descrevemos um caso de telangiectasia macular eruptiva perstans enfocando nas características dermatoscópicas dessa doença.

Palavras-chave: Dermoscopia; Diagnóstico; Mastocitose; Mastocitose cutânea

### INTRODUCTION

Mastocytosis is a condition characterized by the proliferation and accumulation of mast cells in the skin and / or in other organs and tissues. It can be classified as cutaneous or systemic. The cutaneous forms of mastocytoses include urticaria pigmentosa, diffuse cutaneous mastocytosis, maculopapular mastocytosis, mastocytoma and telangiectasia macularis eruptiva perstans (TMEP).1-6 TMEP is a rare disease, found in less than 1% of patients with cutaneous mastocytosis. It affects predominantly adults and is characterized by erythematous and/ or yellow-brownish macules with telangiectasias, preferably located on the trunk and upper limbs. Darier sign (urticaria after the friction of a lesion) is absent in most cases. The diagnosis of TMEP is based on the characteristics of the skin lesions and histopathological analysis. 1,2,4 Dermoscopy has been used as a diagnostic aid, as it reveals a characteristic reticular vascular pattern that helps differentiate TMEP from other forms of mastocytosis and skin lesions that present vascular patterns in dermoscopy. 7,8

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#### CASE REPORT

A 59 year-old male patient reported the appearance of erythematous skin lesions on the trunk and upper limbs 20 years ago, which regressed after a few months, leaving residual hyperchromic lesions. He denied any itching in the lesions. During the examination he presented with erythematous-brownish macules ranging from 0.5 to 5.0 cm in diameter, confluent, distributed in the abdomen, chest, back and upper limbs, and residual hyperchromic macules (Figures 1 and 2). Darier sign was negative and on the dermoscopy of the erythematous-brownish lesions, were observed thin and tortuous linear vessels, mild erythema and fine pigment network, compatible with the patient's skin type (Figure 3). Histopathological examination showed dilated vessels with moderate inflammatory reaction around, mainly composed of mast cells, best visualized with Giemsa stain (Figures 4 and 5). The patient did not had lymphadenomegaly or bone changes, and laboratorial tests (blood count and chemistry) were normal.

## DISCUSSION

In 2009, Akay et al analyzed the dermatoscopy of 6 patients with different forms of cutaneous mastocytosis and found two dermoscopic patterns: pigmented network and reticular vascular pattern. The pigmented network was observed in patients with maculopapular mastocytosis and urticaria pigmentosa and the reticular vascular pattern in patients with TMEP.<sup>7</sup>

Later, Vano-Galvan et al (2011) evaluated the dermoscopic findings of 127 patients with cutaneous mastocytosis and managed to characterize four distinct patterns: pigmented network, yellow-orange amorphous area, brown amorphous area and telangiectasia with reticular pattern.<sup>8</sup>

In this study, the reticular vascular pattern was found in all patients with TMEP and in some cases of urticaria pigmentosa. It was also observed in these patients, a correlation between the presence of reticular vascular pattern and the severity of symptoms and the need for daily use of antihistamines. This was not reproduced in the present case, since the patient had this dermoscopic pattern but the lesions were asymptomatic.



FIGURE 1: Erythematous-brownish macules distributed in the abdomen



FIGURE 2: Erythematous-brownish macules and residual hyperchromic macules in the back



FIGURE 3: Dermoscopy: thin and tortuous linear vessels, mild erythema and fine pigment network

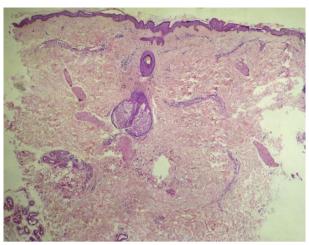


FIGURE 4: Histopathology (HE): presence of dilated vessels with moderate inflammatory reaction in the dermis

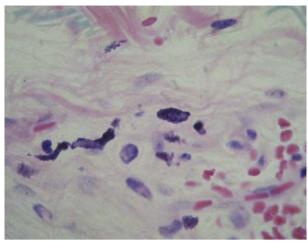


FIGURE 5: Histopathology (Giemsa stain - 1000x): presence of mast cells in the dermis

Some skin lesions such as clear cell acanthoma, non-pigmented eccrine poroma, squamous cell carcinoma, amelanotic melanoma and porocarcinoma can show the vascular pattern in dermoscopy. The TMEP differentiates itself by presenting reticular vascular pattern with telangiectasias of small caliber.<sup>8</sup> This pattern of TMEP is correlated with the histopathological examination, which demonstrates

dilatation and vascular proliferation associated with the presence of mast cells in the dermis.

In conclusion, dermatoscopy can be used as a complementary tool for the diagnosis of TMEP, but more studies are needed to evaluate its use as a prognostic factor regarding the severity of the patient's symptoms.  $\square$ 

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