

## Skin Necrosis as a Predictive Factor for Neoplasia in Dermatomyositis

### Necrosis cutánea como factor predictivo de neoplasia en la dermatomiositis

To the Editor:

Dermatomyositis (DM) is a rare myopathic disorder characterized by symmetric proximal muscle weakness and characteristic skin lesions; it is associated with an underlying neoplasm in up to 30% of cases.<sup>1-7</sup> Several studies have recently been aimed at identifying demographic, clinical, and laboratory data that could predict the individual risk of malignant tumors in patients with DM. Several authors agree in considering the appearance of necrotic skin lesions as a potential risk factor for paraneoplastic DM.

We report the case of a 58-year-old man who came to our department with a 2-month history of symmetric muscle weakness associated with multiple erythematous-purpuric papules over the interphalangeal joints of both hands (Gottron papules) and asymptomatic edematous violaceous plaques (heliotrope rash) (Figure 1A). Other skin findings were periungual telangiectasia and hypertrophy of the nail cuticle (Figure 1B). The most relevant clinical finding consisted of extensive areas of slightly painful skin necrosis in a symmetrical distribution over the upper third of the thorax and back (Figure 1C). Histology showed an atrophic epidermis, mild interface dermatitis with vacuolar degeneration of the basement membrane, and a superficial perivascular lymphocytic inflammatory infiltrate accompanied by interstitial deposits of mucin. Laboratory findings, with elevated levels of muscle enzymes (creatinine phosphokinase, 5280 U/L) and aldolase (47.5 U/mg) were compatible with a diagnosis of DM.

The presence of areas of necrosis and the age of the patient were suggestive of a paraneoplastic origin of the DM. Computed tomography revealed a gastric tumor with liver metastases (Figure 2). The patient received chemotherapy, including 5-fluorouracil, anthracyclines, and cisplatin; the chemotherapy reduced the tumor mass and the skin lesions resolved.

The definition of predictive factors for malignancy in adult DM will make it possible to more accurately select those patients in whom an exhaustive search for a tumor must be performed. The epidemiologic, clinical, and laboratory findings that are currently considered as potential markers for paraneoplastic DM are shown in the Table.<sup>1-7</sup> Several studies show that skin necrosis is an important independent predictive factor for an underlying tumor in patients with DM.<sup>1-4</sup> In the study by Sparsa et al,<sup>2</sup> both of the 2 patients who presented skin necrosis had associated neoplasia. A recent analysis based on the study of 26 patients with DM found a positive predictive value of 71.4% for the association of skin necrosis and cancer.<sup>4</sup> The clinical spectrum of skin necrosis includes epidermal necrosis, digital necrosis (periungual and of the digital pulp), and mucosal necrosis.<sup>4</sup>

Our case and the previously published series<sup>1-4</sup> suggest that this clinical parameter, which can be easily identified by the dermatologist, is probably the most important indication for an exhaustive and detailed investigation for underlying cancer in DM. Although ovarian cancer is currently considered to be the malignant tumor most frequently associated with paraneoplastic DM, other tumors that are reported in the literature and need to be ruled out are lung cancer, pancreatic cancer, and gastrointestinal cancer. Testicular cancer is the most prevalent cancer in young patients.<sup>1-7</sup> Finally, nasopharyngeal cancer should be ruled out in Asian patients.<sup>5</sup>

In conclusion, the development of necrotic lesions in the context of dermatomyositis is a rare occurrence. However, regardless of the age of the patient at onset of the disease, these lesions require an exhaustive study to rule out an underlying tumor.



**Figure 1** A, Asymptomatic erythematous-violaceous plaques located symmetrically around the eyes. B, Gottron papules and hypertrophic nail cuticles with areas of necrosis. C, Extensive skin necrosis with a symmetrical distribution on the trunk.



**Figure 2** Computed tomography image. Areas of increased uptake compatible with gastric cancer with liver metastases (red arrows).

**Table 1** Predictive Factors for Malignancy in Dermatomyositis and Polymyositis

Personal history of a previous tumor
Sudden onset of skin/muscle symptoms
Skin necrosis*
Constitutional symptoms
Laboratory parameters:
Elevated levels of CPK (>1000 U/L)
Low C4 counts (<40 mg/dL)
Elevated p155/140 antibody titer

\*Includes epidermal necrosis, digital necrosis (periungual and of the digital pulp), and mucosal necrosis.  
Abbreviation: CPK, creatine phosphokinase.

## Conflicts of Interest

The authors declare that they have no conflicts of interest.

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## Dermoscopic findings in solitary reticulohistiocytosis

### Hallazgos en dermatoscopia del reticulohistiocitoma cutáneo solitario

*To the Editor:*

Solitary cutaneous reticulohistiocytosis, initially described by Zak in 1959,<sup>1</sup> is a variant of multicentric reticulohistiocytosis that is limited to the skin. It is a rare condition that is characterized by rapid growth of a single brownish-yellow or reddish lesion, which is usually

asymptomatic. It typically presents on the trunk or the limbs, and rarely on the face.<sup>2</sup> Histology is characterized by a dermal infiltrate of histiocytes with an eosinophilic cytoplasm with a ground-glass appearance and prominent nucleoli.<sup>2</sup> An inflammatory infiltrate composed mainly of lymphocytes is also observed. Hyperkeratosis and, occasionally, parakeratosis may be observed. Immune staining is positive for lysozyme, CD68, and CD163 and negative for CD3, CD20, CD30, human melanoma black-45, and keratins. The condition is not associated with other diseases and recurrence after excision is very rare.

We report the case of a 51-year-old man with no relevant personal history other than hypercholesterolemia, which was being treated with simvastatin. He reported the sudden appearance of an asymptomatic papular lesion