CASE REPORT

Panniculitis in a patient with dermatomyositis *

Paniculitis en paciente con dermatomiositis

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Abstract: Panniculitis is a rarely reported clinical finding in dermatomyositis. It may precede the other manifestations associated with dermatomyositis by as much as 14 months. In all cases, myositis and panniculitis improve simultaneously during treatment. The present report describes the case of a 30-year-old female patient with clinical and histopathological findings consistent with panniculitis two months after the onset of the muscle and cutaneous symptoms that permitted diagnosis of dermatomyositis. The skin lesions regressed following steroid treatment.

Keywords: Dermatomyositis; Panniculitis; Steroids

INTRODUCTION

Panniculitis is a rare skin manifestation of dermatomyositis. Clinically, it presents as painful nodules or plaques on the arms, thighs and buttocks that resemble lobular panniculitis at histopathology. The skin lesions generally occur simultaneously with muscle symptoms. The present report describes a 30-year-old female patient presenting with lesions that were clinically and histologically compatible with panniculitis, followed two months later by muscle and cutaneous symptoms, later diagnosed as dermatomyositis. Regression of the skin lesions was achieved with steroid treatment.

Case Report

A 30-year-old female patient with no relevant medical history was admitted to the Clinical Medicine Department for asthenia, debility and myalgias of approximately 45 days duration. She also reported polyarthralgia and swallowing disorders.

At physical examination, she was found to have edematous, purplish eyelids and patches of alopecia with desquamation on her scalp. No other skin lesions were found. After 15 days, erythematous, hot, painful plaques and nodules appeared around her upper and lower limbs (Figures 1 and 2). Biopsy (Protocol #215124) revealed lobular panniculitis with mucin deposits associated with collagenopathy (Figures 3 and 4). The following supplementary tests were performed:

- Laboratory tests. The findings summarized in Table 1.
- Electromyogram, the results of which discarded the possibility of any neurogenic involvement. Some mild proximal myogenic responses.

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- Two-dimensional echocardiogram, abdominal echography, high-resolution computed axial tomography (HR-CAT) of chest and brain: All normal.
- Spirometry: mild restrictive ventilatory defect.  
- Gynecological evaluation: Normal
- Otolaryngological evaluation by videofluoroscopic swallowing examination: mild oropharyngeal dysphagia without intraoral pressure.

**Diagnosis:** Panniculitis – Dermatomyositis

Treatment was initiated with meprednisone 60mg/day and a good clinical response was obtained. The panniculitis lesions regressed and there was an improvement in muscle symptoms and laboratory tests one week after initiation of steroid treatment.

**Discussion**

The several skin manifestations of dermatomyositis are well known, although panniculitis has rarely been described since the first paper published by Weber and Gray in 1924. Panniculitis is the collagen disease that is most commonly found during the course of systemic lupus erythematosus.

Clinically, subcutaneous involvement presents as erythematous, indurated, painful plaques or nodules situated on the arms, thighs and buttocks, as shown in the present case. Less commonly, the condition may present with asymmetrical, multifocal lipoatrophy without induration.

In all cases, myositis and panniculitis follow a parallel clinical course, with both conditions improving simultaneously during treatment. Recurrence of both conditions has been reported if the steroid treatment is discontinued abruptly. Panniculitis may precede the other symptoms of dermatomyositis by
up to 14 months; therefore, in cases of idiopathic panniculitis, it would be advisable to measure muscle enzyme levels and evaluate the patient periodically. 8

The incidence of malignancy in adult patients with dermatomyositis ranges from 6% to 60% of cases. 9 Only one case of underlying neoplasm (rhabdomyosarcoma in an adult patient) was reported in this group of patients with dermatomyositis associated with panniculitis. 9

The pathogenesis of this condition is unknown. The presence of simultaneous skin and muscle involvement, and the concomitant appearance of cutaneous alterations in the epidermis and subcutaneous cell tissue suggest that they are related. 8

Histology shows lobular panniculitis with a lymphoplasmacytic infiltrate, fat necrosis and consequent fibrosis. Calcified areas, ulceration, vasculitis and endothelial edema may also be present. 8

Pathological studies and clinical observations have suggested that there are different degrees of subcutaneous inflammation in dermatomyositis but that only the severe cases are clinically recognized. Nevertheless, some authors believe that the changes observed in the hypodermis are focal, uncommon and not sufficiently characteristic as to constitute a clinical syndrome of panniculitis. 8

The treatment of choice consists of corticoids, which results in a rapid and complete response 3 such as that achieved in the present case. Other drugs such as methotrexate or intravenous immunoglobulin are used less frequently in patients who fail to respond to steroids. 4,10 It is noteworthy that the difference between this condition and lupus panniculitis is that in the former antimalarial drugs have no effect. 3

The presence of panniculitis in a patient with dermatomyositis is believed to be indicative of good prognosis, since almost all the cases respond well to treatment and malignancy has been detected in only one case. 9 For some investigators, when dermatomyositis presents together with panniculitis, this represents a distinctive subgroup of the disease. 9

REFERENCES


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