Focal Myositis – an atypical presentation of a rare disease

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Abstract

A clinical case of tumoral lesion in a paravertebral location leading to a focal myositis diagnosis is presented. This disease seldom occurs triggering as a rule a number of doubts in the differential diagnosis which in the current case has the particularity of a emerging in a rare topography.

Key words: focal myositis, striated muscle, pseudotumor.

Introduction

Focal myositis is a pseudotumoral lesion of the skeletal muscle, with an inflammatory character of benign course, unknown etiology, compromising the extremities selectively. This nosological entity identified in 1977 is deemed a rare clinical condition and only around one hundred cases have been published in the world literature. The diagnosis is essentially clinical and histological, with a differential diagnosis of malignant tumor of muscle origin, focal infection or venous thrombosis.

Clinical case

Female patient, 67 years old, Caucasian, a gardener, widower. She mentions a painful tumefaction appearing on the left paravertebral region, growing progressively in the last 10 months, followed by a spontaneous moderate local pain, getting worst on dorsal decubitus. She denied any other focal or general symptomatology. She went to her physician, underwent analyses, and thorax and abdomen CAT scans, being referred to Surgery for a lesion biopsy. She was then referred to the Medicine consultation for reassessment and evaluation of the histological result.

In her personal history it was highlighted controlled and medicated hypertension; surgical intervention for stress urinary incontinence at 47 years of age; bilateral carpal tunnel surgically corrected 7 years ago; hysterectomy due to a glandular uterine polyp 2 years ago. No diseases of a family hereditary characteristic. The family history was irrelevant.

In the objective exam there were no changes in the general condition, only to highlight the presence of an ovoid form tumefaction located on the left paravertebral region, about 1 cm [0.4 inch] off the spine, spreading from D12-L4, with a longitudinal diameter about 11 cm [4.3 inch] and a transversal of 8 cm [3.15 inch], without visible inflammatory signs, on which it could be seen a surgical scar 7 cm [2.75 inch] long, after biopsy. It had well defined limits, elastic consistency and was painful to palpation *(Fig.1)*.

In the auxiliary exams it could be verified a moderate increase on CK (459 UI/L), with the reminder hematologic and biochemical values within normal ranges. Thorax and abdomen CAT scan has shown dorsolumbar muscles asymmetry through a suggestive process of fat infiltration on the left dorsal plan reaching the whole *erector spinae*, which is kept confined to the aponeurosis, although it makes it slightly rounded *(Fig. 2)*.

The muscular biopsy has identified material made up of striated muscular tissue where focal necrosis of muscular fibre, its degenerative aspects, adipose regression and focal fibrosis are observed. It can also be seen an inflammatory infiltrate made up by mononucleated elements. Such aspects were considered

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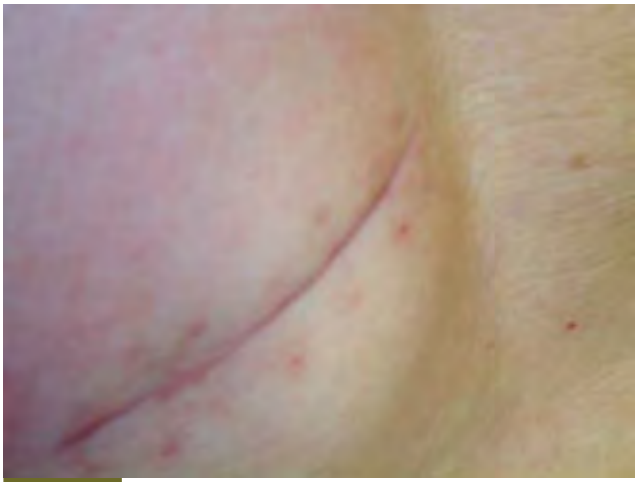

FIG. 1

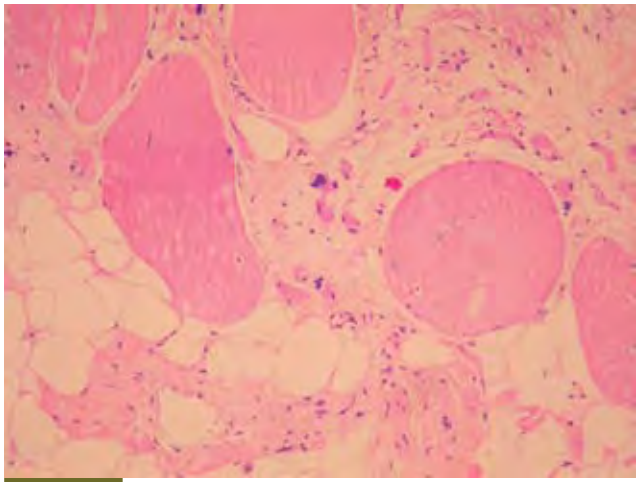

FIG. 3

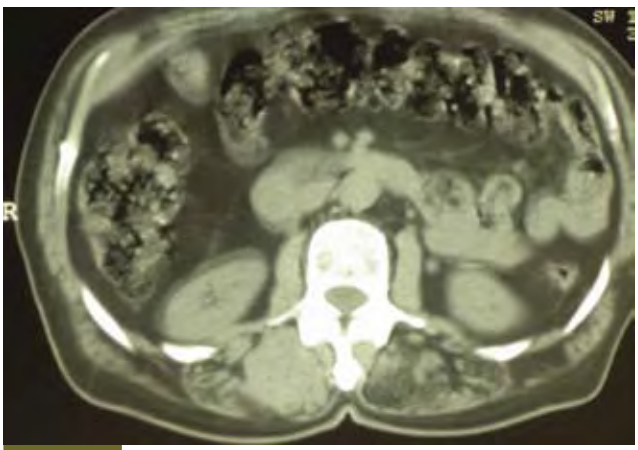

FIG. 2

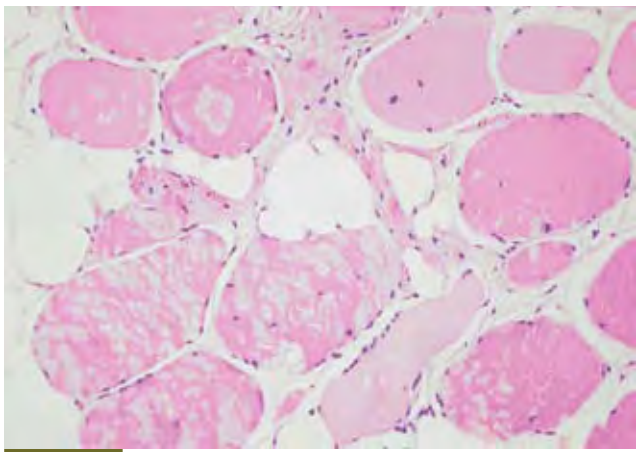

FIG. 4

compatible with an inflammatory myopathy process *(Fig. 3 and 4)*. It was accepted a focal myositis diagnosis and the patient was medicated with prednisone, dosage of 40 mg/day, with a total lesion remission after 4 weeks of therapy. The choice of corticotherapy was based on the slow progression of the disease and the painful symptomatology triggered by dorsal decubitus.

Discussion

Focal myositis was separated as an autonomous nosological entity by Heffner, in 1977[1]. It is considered a rare clinical condition, and around one hundred cases are described in the global literature.[2,3] Clinically, it is translated by an inflammatory process located in the striated muscle, of pseudotumoral expression and benign character, with slow growth (weeks/months), with sizes ranging from 2 to 10 cm [0.8 to 3.9 inch].[1,4-8] It is usually located in the extremities, having as pathognomonic feature the absence of simultaneous systemic symptomatology.[1,4,5,6,8,9] Local pain, usually mild, is a frequent symptom, however difficult painful conditions related with the compression of adjacent structures can arise.[3,10,11] There is not a preferential distribution based on gender or age range, and cases are known both in children as in the elderly.[1,4,5,6] It is characteristic the compromise of an isolated muscle, usually the lower limbs (75% of cases),[1,3,4,5,6] although, there are other locations described, namely the sternocleidomastoid, rectus abdominis, facial and tongue muscles, and seldom paravertebral muscles.[1,3,4,6,8,9,12,13] It usually evolves with a surprising analytical

normality, namely in the inflammatory processes and sedimentation rate, emerging in some cases, a moderate increase on CPK.[1,3,4,6,7,8,9,12,14,15] The clinical evolution tends to a spontaneous regression[3,5,7,8] although a number of recurring situations have been described.[16,17,18,19] Corticosteroids and immunosuppressants are recommended in the long term, compressive symptomatology and also in recurring conditions.[3,4,7,10,11,14,15,16,20]

Some authors suggest, in a non consensual manner, the possibility of this nosological entity evolving to systemic polymyositis.[3,4,6,9,15,18,21-24] It is a clinical and histological diagnosis, although the imagiology aspects (CAT scan and Nuclear Magnetic Resonance imagiology) of muscle tumefaction and adipose infiltration are considered very suggestive.[5,6,8,15,20,25] The etiology is unknown, with a speculating discussion on the infectious pathogenesis (viral) and immunologic mediation or genetic predisposition.[1,3,4,5,26,27] The differential diagnosis is made with striated muscle malignant neoplasm, focal infection or venous thrombotic lesion.[3,4,7,9]

In the current case, it should be noticed the rarity of this nosological entity without any case known being previously published in Portugal, and to be highlighted the unusual lesion topography with only 4 similar locations identified in the literature. ■

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