Recurrent focal myositis

SIR. Focal myositis is a rare, benign, inflammatory pseudotumour of skeletal muscle. Typically, patients present with a localized, painful swelling in one limb without features of systemic involvement. We present one case of a man with recurrent episodes of localized disease.

A 52-yr-old married window cleaner presented with a 3-week history of an acute onset of a mass lesion in his left thigh. The lesion was painful, but he denied any history of trauma. There was no history of fever, rash or generalized muscle dysfunction. There was no personal or family history of connective tissue disease. On examination, he had a diffuse, tender mass on the medial aspect of his left thigh, with normal muscle power and no lymphadenopathy. Physical examination was otherwise unremarkable.

Initial investigations showed normal ESR 9 mm/h, CRP < 10 U/l, CK 81(10–171 U/l) and all autoantibodies were negative. Plain radiographs of the leg and chest were normal. An ultrasound examination and subsequent CT scan confirmed the presence of a solid lesion involving most of the left thigh. Bone scan excluded any bony pathology. MRI of the area showed increased T2 signal intensity from the sartorius muscle with no invasion of adjacent soft tissues, appearances consistent with a diffuse inflammatory myositis. Consequently, he underwent biopsy of this mass which showed actively inflamed necrotic and regenerating skeletal muscle fibres with inflammatory infiltrate including eosinophils, but not an eosinophilic myositis.

On review 3 weeks after the initial presentation, the mass lesion had spontaneously resolved and he was asymptomatic. EMG studies showed no evidence of active muscle disease. Repeat muscle biopsy 4 months later was essentially normal with no evidence of necrosis, fibrosis or increased regeneration. CK was consistently normal, there was no evidence of an acute-phase response and autoantibodies remained negative.

Six months later, he presented acutely with a 48-h history of pain and localized swelling in his left upper arm. Again, there was no history of trauma, but on this occasion he recalled a similar event 3 yr previously with a painful swelling above his left elbow which was not severe enough to seek medical attention and which also resolved spontaneously after 6 weeks. On examination, he was afebrile and had a tender, firm mass in his left upper arm. Laboratory parameters were again normal. Muscle biopsy from his left deltoid showed evidence of a localized nodular myositis. This lesion also resolved...
without any specific therapy and he has remained well over the last year.

The inflammatory myopathies are a heterogeneous group of disorders comprising many separate and distinct disorders of muscle with different clinical signs, symptoms, laboratory abnormalities and prognoses, but all characterized by muscle degeneration mediated by inflammatory processes. The majority are idiopathic, but may be associated with malignancies or overlap syndromes.

Focal myositis is a rare, benign inflammatory pseudotumour of skeletal muscle presenting as a localized, painful swelling within the soft tissues of an extremity. First described in 1977 by Heffner et al. [1] and Cumming et al. [2], it must be differentiated from neoplasms, particularly soft-tissue sarcomas, infection, ischaemia, trauma and vasculitis. Over 40 case reports have been published to date [3–7] and several other names have been used since the first description, including localized nodular myositis, focalized interstitial polymyositis, interstitial nodular myositis and focal nodular myositis.

Typically, there is no history of trauma and no systemic features. Multiple nodules have been reported [8]. Muscle enzymes and other routine laboratory parameters are generally absent. Standard X-rays are rarely helpful, as are bone scans. CT scanning may exclude local abscess formation, tumour or bony destruction or infiltration, but MRI gives better definition of the involved muscle. Diagnosis is established by biopsy. Characteristically, histological examination shows severe myopathy with inflammatory infiltration, necrosis, variation in fibre diameter and regeneration. Lesions may disappear spontaneously or after biopsy. Surgical excision results in cure, as lesions do not tend to recur after excision. In one case, where surgical excision did not result in cure, steroids were tried unsuccessfully, but the patient responded to methotrexate with progressive regression of the lesion [9].

Focal lesions may progress to a more generalized polymyositis. Some authorities feel that focal lesions should not be seen as a separate entity, but as part of a spectrum of disease. Lesions likely to progress to a more generalized polymyositis are associated with more than one nodule, recurrence after surgery, and an early rise in ESR and/or CK [10]. Patients with focal myositis should, therefore, be reviewed to ensure that progression to a less benign disease is diagnosed and treated early.

M.-M. GORDON, R. MADHOK
Centre for Rheumatic Diseases, Glasgow Royal Infirmary, 84 Castle Street, Glasgow G4 0SF, UK
Accepted 21 June 1999
Correspondence to: M.-M. Gordon.