



Tumoral calcinosis in dermatomyositis

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Case

A 31-year-old Bengali woman complained of discomfort on sitting on hard surfaces over the preceding few weeks. She also felt hard lumps on the junction of the buttocks and legs. Nine years earlier, she was diagnosed with dermatomyositis (DM) (proximal muscle weakness, very high creatine kinase, positive muscle biopsy, heliotrope rash, and interstitial lung disease with positive Jo-1 antibodies). Her DM was very severe especially the lungs requiring prednisolone and intravenous cyclophosphamide for 2 years. Currently, her condition was stable on weekly 12.5 mg methotrexate and 5 mg prednisolone. She walks slowly using a stick.

Physical examination showed multiple hard lumps (1–2 cm in diameter) with mild tenderness within the muscles of the buttocks and the upper thighs and the hamstrings. Plain X-ray of the pelvis showed large calcified nodules within the muscles of the pelvic girdle (Fig. 1). Similar calcifications were seen around the muscles of the shoulder girdles. Her serum calcium, phosphate, alkaline phosphate, 25 hydroxy-vitamin D, parathormone and renal function tests were normal. Analysis of the calcified material removed from our patient using Infrared spectroscopy shows the material to be 99% calcium phosphate as carbonate apatite [Ca₁₀(PO₄CO₃OH)₆(OH)₂].

There are two types of calcinosis that complicate cases of severe DM; deep tumoral within the affected muscles as in our

patient or diffuse lacy reticular deposits within the myofascial planes.¹ In some patients, there is a mixture of both types. The calcinosis of DM is dystrophic.



Fig. 1 Plain X-ray of the pelvis showing large calcified nodules within the muscles of the pelvic girdle

Compliance with ethical standards

The patient has consented to publish her case history and X-rays.

Disclosures None.

Reference

1. Boulman N, Slobodin G, Rozenbaum M, Rosner I (2005) Calcinosis in rheumatic diseases. *Semin Arthritis Rheum* 34:805–812

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