Resolution of osseous sarcoidosis with steroids

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DESCRIPTION

A 56-year-old man with a 10-pack-year history of smoking presented to the clinic with left hip pain. He was treated symptomatically with pain medications. With persistence of symptoms and normal preliminary laboratory results, he underwent MRI of the pelvis which showed lytic lesions suggestive of metastatic disease (figure 1A). Further imaging including CT of the chest revealed bilateral hilar and mediastinal adenopathy along with splenomegaly but no parenchymal lung involvement. Mediastinoscopy with lymph node biopsy showed non-caseating granuloma, and left pubic area biopsy revealed benign bone with epithelioid granuloma, both consistent with sarcoidosis. His pulmonary function tests revealed normal spirometry, lung volume and diffusion. Without any organ dysfunction, he was started on prednisone 40 mg once daily for his hip pain. After 6 months of steroid use, he had significant clinical and radiological improvement (figure 1B). Sarcoidosis is a multisystem disease characterised by the formation of non-caseating granulomas. It occurs classically in lungs and skin but almost any organ can be involved; and bone involvement is also not uncommon. Corticosteroids and/or methotrexate are commonly used in the treatment and usually control symptoms, but radiographs may not show any improvement.¹ Two previously reported cases

Figure 1 (A) MRI axial view showing enhancing lesion in the left acetabulum. (Yellow arrow)(B) MRI axial view showing resolution of the skeletal lesion after 6 months on prednisone(Yellow arrow).

Learning points

- ▶ Osseous sarcoidosis can cause cystic, reticular or destructive lesions of the bone.
- ▶ MRI is the most sensitive imaging modality to detect active granulomas in bone, joints and muscles.
- ▶ Antigranulomatous therapy including glucocorticoid and/or methotrexate is the commonly used treatment, and follow-up imaging may show radiographic improvement.

showed resolution of sarcoid hand bone lesions after treatment with methotrexate and prednisone.^{2 3} Our case was interesting because of the lack of parenchymal lung involvement and near-complete resolution of bony abnormalities on MRI with the use of steroids alone, which is rarely reported.

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