Chest wall tuberculosis

A 28-year-old labourer from Bihar presented to our hospital with fever for 7 months and a rash over his chest for 5 months. Fever was moderate-to-high grade and continuous. Examination revealed an erythematous, macular rash 15 cm × 12 cm over the centre of the anterior chest wall (Fig. 1). The underlying chest wall was warm and tender. The lower end of the sternum was also exquisitely tender. The rest of the general physical examination as well as examination of the cardiovascular system, abdomen and nervous system were normal.

The chest X-ray was normal. Haemogram, liver function tests and renal function tests were normal except for raised erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) levels. The patient was treated with analgesics, antipyretics and broad-spectrum antibiotics but there was no improvement in his symptoms. After a week of antibiotic therapy, fluctuation developed in the skin beneath the rash, and the overlying skin developed induration. Contrast-enhanced CT scan of the thorax (Fig. 2) revealed erosion of the lower part of the manubrium sterni with surrounding collection and soft tissue swelling with features suggestive of osteomyelitis. A fine-needle aspiration cytology from the subcutaneous swelling revealed acid-fast bacilli. A final diagnosis of tuberculous osteomyelitis of the manubrium sterni with a cold abscess was made. The patient received daily self-supervised antituberculosis treatment with rifampicin 450 mg, isoniazid 300 mg, ethambutol 800 mg and pyrazinamide 1500 mg with pyridoxine 20 mg for 2 months followed by 4 months of rifampicin and isoniazid. Following 6 months of antituberculous treatment, the patient made an uneventful recovery (Fig. 3).

It is important to consider underlying systemic diseases in a patient presenting with swelling and prolonged fever. Tuberculosis may underlie an inflammatory chest wall swelling.

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