Shoulder Tuberculosis - An Unusual Case

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Abstract

A case of shoulder tuberculosis is described, involving the deltoid, subscapularis and long head of biceps tendon. A 25 year old girl presented with pain and restricted shoulder movements since two months. Patient was treated with antituberculous treatment for pulmonary tuberculosis since six months. She was being treated as stiff shoulder, but her MRI showed abscess of the upper end humerus. An arthroscopy followed by exploration and debridement of the shoulder was performed, which confirmed histopathologically as tuberculosis.

Introduction

Shoulder tuberculosis has been a diagnostic and therapeutic problem for many years. It is a rare condition forming 1% to 2% of skeletal tuberculosis, which can be acquired haematogenously or by direct spread. Most commonly tuberculosis affects the humerus glenoid, or rarely the synovium. It rarely presents at the stage of synovitis. The common variety is dry atrophic form i.e. carries sicca. Rarely there is swelling and cold abscess or sinus formation, presenting in the deltoid region along the biceps tendon or in the supraspinatus fossa. Here we present such an unusual presentation.

Case Report

A 25 year old girl presented with pain and restricted shoulder movements since two months. She was being treated for pulmonary tuberculosis (Fig. 1) since 6 months, but within 4 months of treatment she started complaining of pain in shoulder and restricted range of movements. X-rays (Fig. 2) showed general rarefaction of upper end humerus. MRI (Figs. 3,4,5,6) of the shoulder showed involvement of the upper end humerus, subscapularis, deltoid and long head of biceps tendon. Her ESR was 65 mm/hour.

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Fig. 1: Plain X-ray of the chest (PA) view showing pulmonary tuberculosis

Treatment

Patient was explored surgically and a thick sheath of granulation tissue was seen covering the long head of biceps tendon. Thick pus was removed between the deltoid muscle and the Humerus, a drill hole and 1 cm window was made in the metaphysis of the upper humerus.
Fig. 6: Transverse MRI cut showing pus over the upper end humerus, subscapularis, deltoid and long head of biceps tendon

end humerus, all granulation tissue was suggestive of tuberculosis. A thick membrane of granulation tissue was seen occupying the medulla of the humerus, which was scooped and excised and sent for histopathology. Thus the medulla was relieved of underlying pressure.

She was put on abduction splint and pendulum exercises for 6 weeks and then allowed active shoulder movements.

Discussion

Shoulder tuberculosis has been appreciated for many years\(^3\) but is very uncommon. The
incidence has been reported to be 1-2%. Most of the cases are treated conservatively, but an abscess when formed requires decompression and drainage. Advance cases lead to inferior subluxation of humeral head and fibrous ankylosis.

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References