



STERNAL TUBERCULOSIS MIMICKING COSTOCHONDRITIS

Pulmonary Medicine

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ABSTRACT

Sternum is one of the least common bones of the body to get infected. 54 year old male patient who presented with a tender progressively increasing swelling in the manubriosternal joint junction along with features of fever, loss of appetite and loss of weight. Patient was treated for costochondritis but with no improvement. Patient had increased CRP and came to be MANTOUX TEST POSITIVE, but chest xray and sputum for afb were negative. Patient underwent a CT scan chest revealed Manubriosternal junction shows erosive changes with suggestive of edema of overlying and adjacent soft tissue on left side at level of second costochondral junction. Minimal soft tissue noted beneath the second left costochondral junction with extension to subpleural location as well as minimal consolidation noted in underlying adjacent left lung. Patient was started on ATT and swelling significantly reduced. Thus, early diagnosis of sternal tuberculosis prevented its complications.

KEYWORDS



INTRODUCTION:-

Sternum is one of the least common bones of the body to get infected. Sternal osteomyelitis accounts for less than 2% of cases of osteomyelitis. Sternal tuberculosis can result from direct extension of disease from hilar lymph nodes, hematogenous or lymphatic dissemination. An unusual case of pain and swelling over the manubrium sterni is being reported.

Case presentation:-

A 54 year old male patient presented with painful swelling over the anterior part of chest noticed since 1 month. It has gradually progressed over the month. Along with this patient suffered from fever, cough with white coloured scanty expectoration along with loss of 6 kg all over the course of one month. An immunocompetent man with previous medical history being unremarkable. On clinical examination patient has a hard bony swelling of size 2cm*2cm tender to touch with no local rise of temperature with other systems being normal.

Investigation :- Complete haemogram -Hb-13.5g/dl, TLC-14.6g/dl, PLT-1,60,000 with ESR- 20mm/1st hr Absolute eosinophil count -575 cells/cmm. Peripheral smear showing normocytic normochromic picture. CRP-32mgms/l. Chest xray was found to be normal. Sputum for AFB was negative. Tuberculin test was positive (15mm). CT chest revealed Manubriosternal junction shows erosive changes with suggestive of edema of overlying and adjacent soft tissue on left side at level of second costochondral junction. Minimal soft tissue noted beneath the second left costochondral junction with extension to subpleural location as well as minimal consolidation noted in underlying adjacent left lung. Rest of body of sternum, sternoclavicular joint appear within normal limits. Patients was deferred biopsy in the view of its proximity to aorta.

Treatment and follow up :-

Patient was started on standard antitubercular therapy with 2 months of Isoniazid, Rifampicin, Ethambutol and Pyrazinamide according to body weight and 4 months of Isoniazid and rifampicin. Within a week

of starting of therapy patient showed no signs of fever cough or expectoration. Along with a sense of wellbeing patient gained appetite and weight of 1kg in about a week. Over a month patient had gradual reduction of swelling of the sternum (now was 1.5*1.5cm) and complete subsidence of pain.

DISCUSSION :-

The global annual incidence of 9.4 million TB cases, among those 2 million occurred in India. Notification of new EPTB under national program was 226,965 with a rate of 19/100,000 population during 2011. Extrapulmonary Tuberculosis constitutes 15-20% of case load. Further spine and hip are most common sites among skeletal system. Sternum is still rarer which is predominantly seen in middle aged adult. CT scan is more sensitive for osseous destruction where as MRI for early marrow and soft tissue lesion. In our case by early diagnosis of sternal TB we prevented complications like secondary infection, fistula formation, spontaneous fractures of sternum, compression of the trachea and migration of Tb abscess into mediastinum. Tuberculosis can present in any form/organ which continues to baffle physicians with varied presentation. Hence, it's important to have a high index of suspicion for enabling early diagnosis and treatment.

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