Abstract: Introduction - Tuberculosis of the clavicle without involvement of the neighboring joints can be seen rarely. Most of the patients are children presenting with painful swelling of the clavicle associated with formation of cold abscess or sinuses. Treatment is essentially antitubercular drugs. Surgical excision may be rarely justified when diagnosis is uncertain or disease is unresponsive or for removal of a large sequestrum. Method - We had an opportunity to observe 4 patients with osteolytic lesion of the clavicle with or without the involvement of the neighboring joint. In our study there were 1 male patient and 3 female patients. They were investigated and the pathology of the lesions was evaluated. The incidence of the disease pathology and treatment outcome was analyzed. Results - All cases were diagnosed as Tuberculosis of clavicle histologically by open biopsy and were started with ATT emphorically. One case required only conservative management and further 3 cases required surgical intervention. From our study the incidence of osteolytic lesions of the clavicle is likely due to tuberculosis and they are easily treatable with ATT and certain surgical interventions. We found that, the prognosis was good in all cases. Management of osteolytic lesions of clavicle is undemanding, but appropriate diagnosis must be obtained through proper histological and radiological investigations. Any osteolytic lesions of clavicle should be considered as malignant unless proven, as the incidence of tuberculosis of clavicle which also presents as osteolytic lesion is very rare. Keyword: Osteolytic lesion, clavicle, Tuberculosis, Antituberculous drugs.

Introduction: Tuberculous bacilli have lived with mankind since time immemorial. The clinical features and communicability of tuberculosis were known before 1000 B.C. Any osteoarticular or bony tubercular lesion is the result of a hematogenous dissemination from a primarily infected visceral focus. The primary focus may be active or quiescent, either in the lungs or in the lymph glands of the mediastinum, mesentery or cervical region, or kidneys or other viscera.

Vertebral tuberculosis is the commonest form of skeletal tuberculosis and it constitutes about 50% of all cases of tuberculosis of bones and joints. Involvement of rare sites such as tuberculosis of clavicle is very rare and constitutes less than 1%. TB of the clavicle though a rare medical entity, this uncommon case of TB Clavicle may present as an “Osteolytic lesions of clavicle”.

This study was intended to find out the disease nature of osteolytic lesions of clavicle. All the cases were investigated properly and they were treated according to the diagnosis arrived. All the cases were followed up regularly to arrive the conclusion of the study. In a nut shell, the aim of this study is to evaluate the presentation of osteolytic lesions of clavicle and to assess the outcome based on pathology of the lesion & outcome of various treatment methods.

Method: 4 Patients with osteolytic lesions over clavicle were taken in to study, 1 male patient and 3 female patients were investigated and the pathology of the lesions was evaluated. All of them underwent series of investigations like complete Blood count, X-Ray, CT, MRI and Histopathology. The incidence of the disease pathology and treatment outcome was analyzed.

CASE 1: 52 yr old female, Kanniyammal presented with a Lesion over medial end of Right clavicle for the past 7 months. O/E: Sinus over the lesion present, Blood picture inconclusive X-Ray and CT.
Surgical pictures:

Biopsy shows - Granulomatous lesion with superadded infection. Treatment given - ATT for six months.

CASE 2:
Ø 65 yr old female Mohana presented with c/o Pain & swelling after trivial trauma 1 month duration
Ø H/O Pain & swelling over Rt clavicle for the past four months.
Ø Measures 4 x 5 cm.
Ø/E: Swelling not warm, not tender, soft and Fluctuate.
X Rays: Osteolytic lesion

MRI - cold a Treatment:

Open biopsy was done and surgical drainage of abscess was done. Histologically proved to tuberculosis of clavicle and she was started on ATT.

Bscess

Case 3:
• 17 year male presented with Pain in cervical region and right shoulder with No neurological deficit.

X ray: Osteolytic lesion of C3 vertebra and distal end of right clavicle noticed.
Case 4:
26 yr old Malathi presented with painless swelling over medial end of clavicle Rt side.
O/E: Swelling hard on palpation, Measures 1 x 1 cm, no scar or sinuses.

DISCUSSION
Tubercular Osteomyelitis:
Clavicle TB Incidence < 1 % of skeletal TB
Clinical presentation:
– Painful swelling of clavicle
– Cold abscess, sinuses
– Constitutional symptoms rare
Associated other joint involvement present usually.

X-ray:
– shows diffuse thickening and honeycombing,
– multiple cystic cavities
– sequestrum
– Pathological fractures

Blood picture-equivocal
CT & MRI- soft tissue involvement and cold abscess.
Treatment: ATT (mainstay), 2 months intensive phase-4 drugs and 6-12 month continuous phase-2 drugs.
Surgical treatment:
– if diagnosis is uncertain,
– Unresponsive to chemotherapy
– For removal of large sequestrum
• Large part of clavicle can be excised without loss of function [srivastava et al. 1974]

Results:
All 4 cases were started with ATT empherically. Out of which, 3 Cases required surgical intervention like open Biopsy, curettage and Drainage. We found that, the prognosis was good in all cases.

Conclusion:
• In my study I found that, The incidence of Osteolytic Lesions of clavicle is due to Tuberculosis and they are easily Treatable with ATT and certain surgical interventions like excision of part of clavicle. Management of clavicle osteolytic lesions is undemanding, but appropriate diagnosis must be obtained through proper histological and radiological investigations. Specific attention should be directed to patients older than 50 years. These lesions should be considered as malign unless proven otherwise.
References: