

## AN UNUSAL PRESENTATION OF TUBERCULOSIS OF ILIAC BONE

*Ishtiaq Ahmed Chaudhary<sup>1</sup>, Samiullah<sup>2</sup> & Ashraf Ali Mallhi<sup>3</sup>*

### SUMMARY:

Tuberculous osteomyelitis is not uncommon but isolated involvement of bone other than spine or joints is a rare entity. An unusual presentation of tuberculous osteomyelitis of iliac bone seen as a buttock abscess and abscess in right iliac fossa simultaneously having communication through a defect in the iliac crest is presented.

**KEY WORDS:** Tuberculosis, Osteomyelitis, Iliac bone, Abscess

Pak J Med Sci October-December 2005 Vol. 21 No. 4 489-490

### INTRODUCTION

Tuberculosis is an ancient disease. Its evidence has been found in Egyptian Mummies and in the Grico-Roman civilization in various forms<sup>1</sup>. Tuberculosis is common in tropical region including Pakistan and developing countries<sup>2</sup>. In spite of major advances in medicine, diagnosis of this disease some times becomes a dilemma. So delay in diagnosis is very common which leads to increase in number of cases of abdominal tuberculosis and other forms of extra-pulmonary tuberculosis. Tuberculous osteomyelitis is rare and occurs following the haematogenous spread from the primary focus in the lungs or gut. Majority of cases presented late in our set up which causes delay in management, increases number of complications and atypical presentations. Tuberculosis is on increase in developed world due to drug resistance, poor compliance among patients

especially drug addicts and in immuno-compromised patients.

### CASE REPORT

A 35 years old female was admitted in surgical ward with history of low grade fever off and on, dull, low intensity pain in right iliac fossa and gradually increasing mass right buttock for last two months. There was no history of anorexia, weight loss, urinary or bowel complaints. She had no complaints of backache. On examination she was afebrile (98.6°F). There was no pallor. There was immobile, non-tender, soft to firm mass, about 15x15 cm size in right iliac fossa. Patient had also non-tender, soft fluctuant swelling in right gluteal region. On investigations her Hemoglobin was 10.2 gm%, ESR 62 mm fall at the end of first hour, X-rays chest was normal. X-ray lumbosacral spine revealed no abnormality. X-ray pelvis shows a well-defined, radiolucent defect in the right iliac crest about 1x1 cm in size (Fig-1). Ultrasound abdomen and CT scan shows cystic mass about 15x12 cm in right iliac fossa. Needle aspiration of buttock swelling showed thick greenish pus. Incision and drainage of buttock abscess was done in general anaesthesia. During drainage it was found that buttock abscess has got communication with the abscess in the right iliac fossa through defect in ala of right ilium. Histopathology of curetted piece of bone showed tuberculous osteomyelitis. With repeated dressings and antitubercu-

1. Dr Ishtiaq Ahmed Chaudhary FCPS  
Assistant Professor of Surgery,  
Fauji Foundation Hospital, Rawalpindi.
2. Dr Samiullah FCPS  
Assistant Professor Surgery,  
Fauji Foundation Hospital, Rawalpindi.
3. Prof. Major General (Retr) Ashraf Ali Mallhi FRCS, FCPS  
Head of Department Surgery  
Foundation University Medical College,  
Rawalpindi.

Correspondence  
Dr Ishtiaq Ahmed Chaudhary  
E-mail: surgish2000@yahoo.com

- \* Received for publication: December 3, 2004  
Accepted: June 15, 2005



Fig-1: X-rays right hip bone showing a well defined radiolucent defect in iliac bone

lous chemotherapy patient recovered within two months.

## DISCUSSION

Tuberculosis is emerging as one of the major killers worldwide. It is responsible for 8 million new cases and three million deaths annually<sup>3,4</sup>. It is still considered a major health problem worldwide. WHO in 1993 declared tuberculosis as a global emergency<sup>5</sup>. Pulmonary tuberculosis is the commonest form but extrapulmonary tuberculosis can affect any organ system of the body. It is estimated that 10% to 15% of tuberculosis is extrapulmonary and that 10% of extrapulmonary tuberculosis is skeletal<sup>6</sup>. Almost half of the patients with skeletal tuberculosis have spinal involvement. The hips and knees are next most frequently affected but the other sites are rare. Diagnosis of extra-pulmonary tuberculosis is often difficult because of different spectrum of clinical presentation and non-availability of sensitive or specific diagnostic tests<sup>7</sup>. Tuberculous osteomyelitis is almost always osteoarticular in 2-3% of cases and 7% of these may have involvement of more than one site<sup>8</sup>. Isolated involvement of the bone in tuberculosis is rare entity. The bony involvement sparing the joint occurs

in ribs, metacarpal, metatarsals, calcaneum, femur, tibia, fibula, radius, humerus, sternum, facial bones, pelvis and skull<sup>8,9</sup>. Tuberculous bony lesion can start anywhere in the bone with bony necrosis, caseation and formation of cold abscesses, which may or may not form a sinus. Diagnosis at an early stage is by far the most important of the management, which is often missed because of the rarity of bony involvement, atypical clinical presentation as in this case. Histology is mandatory for the confirmation of the diagnosis. Excision biopsy is preferred method, which not only confirms the diagnosis but also helps in the removal of osseous necrotic material and early healing<sup>10</sup>. Osseous lesions are relatively more resistant to treat than the synovial lesions. In the typical tubercle the epithelioid cells become less compact and soon the tubercle gets unrecognizable because the epithelioid cells and lymphocytes get widely scattered. The central caseous area gets smaller or even gets absorbed with prevalence of fibrosis<sup>8</sup>. Tuberculous osteomyelitis of rare sites is difficult to diagnose. Recurrence is not uncommon in tuberculous osteomyelitis. These patients should be followed up routinely during and after chemotherapy.

## REFERENCES

1. Ravignone ML. Global epidemiology of tuberculosis: morbidity and mortality of a worldwide epidemic. *JAMA* 1995;273:220-6.
2. Hameed F, Malik MA. Abdominal tuberculosis - profile of 50 cases. *J Coll Physicians Surg Pak* 2000;10(4):1256-7.
3. Almani SA, Memon NM, Qureshi AF. Drug resistant tuberculosis in sindh. *J Coll Physicians Surg Pak* 2002;12(30):136-9.
4. Mehmood A. Multi-drug resistance tuberculosis. *J Pak Med Assoc* 2001;51:204-5.
5. Mirza M, Sarwar M. Tuberculous injection abscess. *J Surg Pak*.2003;8(4):37-8.
6. Carensale PG. Tuberculosis in, A H Crenshaw's (editors) *Campbell's Operative Orthopedics* 7<sup>th</sup> edit. The CV Mosby Company Toronto 1987;699-709.
7. Channa GA, Khan MA. Abdominal tuberculosis "surgeons" perspective. *J of Surg Pak* 2003;8(4):18-22.
8. Bast A, Zubari AH, Rehman AZ. Tuberculous osteomyelitis. *J Surg Pak* 2003;8(4):13-7.
9. Griffith et al. Imaging of musculoskeletal tuberculosis: a new look at an old disease. *Clin Orth*. 2002;398:32-9.
10. Vohra R, Kang EIG, Dogra S, Saggar RR, Sharma R. Tuberculous osteomyelitis. *J Br Jt Surg* 1997; 79(4):467-8.