A Case Report - Iliac Bone Tuberculosis With Iliopsoas Abscess.

H SATISHCHANDRA, ANURADHA, TK VIRUPAXAPPA

Ind J Radiol Imag 2005 15:2:255-258

Key words: - Tuberculosis, Iliopsoas Abscess, Crossed Ectopia.

INTRODUCTION:

Skeletal tuberculosis is common among the developing countries. Tubercular cold abscess usually is a sequale of spondylodiscitis. Tuberculosis involving the pelvic bones with abscess formation is a relatively rare entity. Tuberculosis of the sacroiliac joint, sacrum, and pubic bones have been reported. Here we report a case of tubercular osteolytic lesion of the iliac bone with iliopsoas abscess.



Fig 1

CASE REPORT:

A twenty two year old young man was referred for ultrasound abdomen for right iliac fossa mass with clinical suspicion of spigelian hernia .He had history of weight loss and dragging pain in the right iliac fossa.Ultrasound examination revealed a large abscess arising from the iliacus muscle [Fig1, 2] with the abscess continuing up to the insertion of iliacus at the lesser trochanter, coursing

lateral to femoral vessels[fig3]

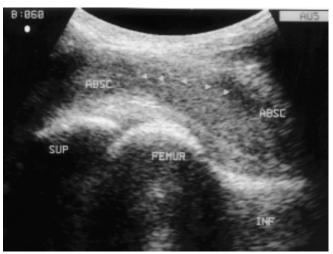


Fig 2



Fig 3

From the Dept. of Radio-Diagnosis, Bowring and Ladycurzon hospitals, Bangalore Medical College, Bangalore.

Request for Reprints: PROF SATISHCHANDRA H. Prof & Head, Dept. of Radio-Diagnosis, Bowring and Ladycurzon hospitals, Bangalore Medical College, Bangalore.

Received 6 August 2003; Accepted 10 April 2004

256 H Satishchandra et al

Abscess was seen to extend through the abdominal muscle fascicles and pointing subcutaneously with few calcified foci within the abscess.[fig4]

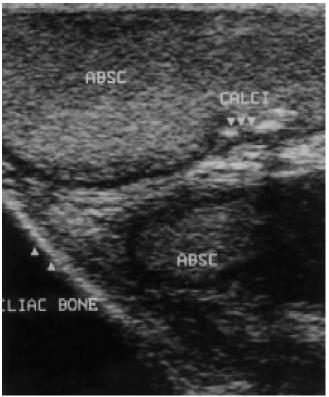


Fig 4



Fig 5

A large defect was noted in the right iliac bone through which the abscess extended into the gluteal muscles[fig 5]. Incidentally crossed fused ectopia of left kidney was noted.

Ultrasound diagnosis of iliac bone defect was confirmed when radiogram of pelvis was taken and a large lytic lesion was noted in the right iliac bone Fig 6.



Fig 6

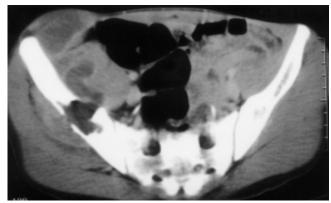


Fig 7

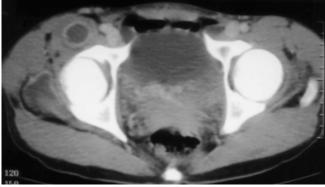


Fig 8

The patient underwent CT scan of abdomen and pelvis.CT revealed a loculated collection in right iliopsoas muscle with subcutaneous extension in the right inguinal region, right gluteus medius and minimus with destruction of iliac bone .[fig7,8,9]

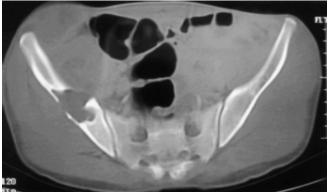


Fig 9



Fig 10

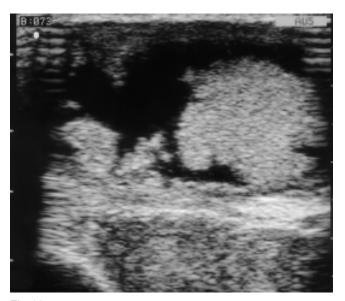


Fig 11

One lymph node was noted in the aortocaval region. There was no free fluid in abdomen or pelvis. Thickened pleura was noted on the left side. Spine appeared normal. Ultrasound diagnosis of incidental crossed fused ectopic left kidney with fusion at the lower pole of right kidney was confirmed [.fig10]

The patient was started on antitubercular therapy after nondependent drainage of about two hundred and fifty ml of pus, after confirmation by biopsy. Residual collection with abscess in the process of resolution can be seen on follow up sonography[Fig 11] after one and a half month. On follow up the patient is doing well.

DISCUSSION:

Skeletal tuberculosis is one of the important manifestations of extrapulmonary tuberculosis. Skeletal involvement constitutes less than 3%[1] of tuberculosis.

Fifty to sixty percent[2] of skeletal tuberculosis involve spine. Involvement of flat bones like innominate bone is a rare entity, true incidence not being known Radiographs reveal irregular cavities and areas of bone destruction with little surrounding sclerosis or periosteal reaction, unless secondary infection through a sinus supervenes. If complicated by secondary infection, it may be difficult to differentiate tubercular osteomyelitis from pyogenic osteomyelitis.

Most common appearance of tubercular abscess is a hypoechoic and inhomogeneous pattern .Sometimes the caeseum makes the abscess solid and hyperechoic[3] .Calcifications occasionally can be seen , particularly in tubercular abscess [4,6], as in our case. Ultra sound has proved to allow early unquestionable diagnosis of tubercular abscess and to confirm clinical suspicion.

During the destructive phase of the disease, CT clearly shows the sequestration and cortical breaks. CT also outlines the extent of the bone destruction [1,5] soft tissue involvement and is helpful in facilitating biopsy.

The basic treatment of patients with skeletal tuberculosis is adequate and prolonged antituberculous therapy. Plain radiographs, CT scans, and MRI done during the follow-up of these patients may show advancing lesions up to 3 to 4 months after the start of treatment. This is because the imaging appearances lag behind the biologic process of repair. Even after complete clinical and radiological healing, there may be residual cavities observed on serial CT scans or on radiographs. These are of little consequence regarding the durability of healing and chances of recrudescence. These cavities are filled with fibrous or fibro-osseous tissue and do not warrant surgical

258 H Satishchandra et al

intervention. If however, the imaging done at 6 to 7 months of adequate chemotherapy shows evidence of deterioration of the lesion, one should suspect a non-responding lesion, which may be caused by drug resistant disease, an immunocompromised state, or a non-tuberculous disorder. Repeat biopsy and tissue diagnosis (with or without debridement) becomes mandatory in these patients.

When considering the site - the right iliac fossa, with involvement of iliopsoas muscle, differential diagnosis of pyogenic abscess, haematomas, enlargement of iliopsoas bursa, hernias and pseudoaneurysms are to be considered[4]

Thus imaging plays a very important role in the diagnosis of skeletal tuberculosis we have reported this case due to the unusual site of involvement of skeletal tuberculosis.

REFERENCES:

 Babhulkar SS,Pande SK Clinical orthopedics 2002 may [398]:114-20 Unusual manifestation of

- osteoarticular tuberculosis.
- Dr M Natarajan and Dr N Mayilvahanan. Book of orthopedics and traumatology chapter-5
- Grandolfo N Serrato O Sandrone C Radiology med 1993 may;85[5]:574-8,Role of echography in osteolytic tubercular abscesses.
- 4. John R Haaga , Charles F Lanzieri Robert C Gilkeson ;CT and MR imaging of whole body,1705-7
- Morris BS Verma R Garg A Aswathi M Maheshwari M Skeletal radiology 2002 jan ;31[1]:1-8.Multifocal musculoskeletal tuberculosis in children, appearances on CT.
- SK Sharma, A Mohan, Tuberculosis, jaypee publications , page 228
- Ramakrishaiah VP Jain V Choon AT Rao BH, Journal of Indian medical association 2000 march;98[3]:128-9 retroperitoneal cold abscess with tuberculosis of SI joint and pubic bone, a case report of unusual presentation
- 8.. Arch pediatric 1994 may1[5];489-92 Sacral bone tuberculosis in a six year old child .