



**Full Length Research Article**

**TUBERCULOUS SACROILIITIS A RARE CAUSE OF REFRACTORY LOW BACK ACHE - CASE REPORT**

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**ABSTRACT**

Tuberculosis of sacroiliac joints is a very rare cause of low back ache radiating to the thigh and requires a high index of suspicion for its diagnosis. Magnetic resonance imaging is key to early diagnosis of this condition which may prevent further complications associated with it. It is difficult to diagnose due to the vague and non-specific presentations. In a patient presenting with a unilateral destructive sacroiliac lesion, tuberculosis should always be in the differential diagnosis along with psoriatic arthropathy, Reiter's syndrome, and rheumatoid arthritis. The classical presentation of ankylosing spondylitis is that of bilateral, symmetric involvement of sacroiliac joints, whereas unilateral pathology is more typical of infection. Unlike pyogenic, tuberculous osteomyelitis arises insidiously, and takes a chronic course that can be destructive and resistant to control.

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**INTRODUCTION**

Tuberculosis of sacroiliac joints is a very rare cause of low back requires a high index of suspicion for its diagnosis. Magnetic resonance imaging is key to early diagnosis of this condition which may prevent further complications associated with it. It is difficult to diagnose due to the vague and non-specific presentations. Thus, the mean time from symptom onset to diagnosis is 5.5 months in the literature, In the earliest stage of sacroiliac tuberculosis, X-ray may not show any abnormalities. Mild haziness and widening of the S-I joint, especially in the lower part, can be the earliest changes followed by bone erosion. In a subacute or indolent case, sclerotic change of subchondral bone is common in later stages. Bone scan is helpful for early detection of the lesion with increase uptake. CT shows more delicate anatomy than X-ray, and MRI provides differential diagnosis between soft tissue tumor and pyogenic arthritis.

**Case Report**

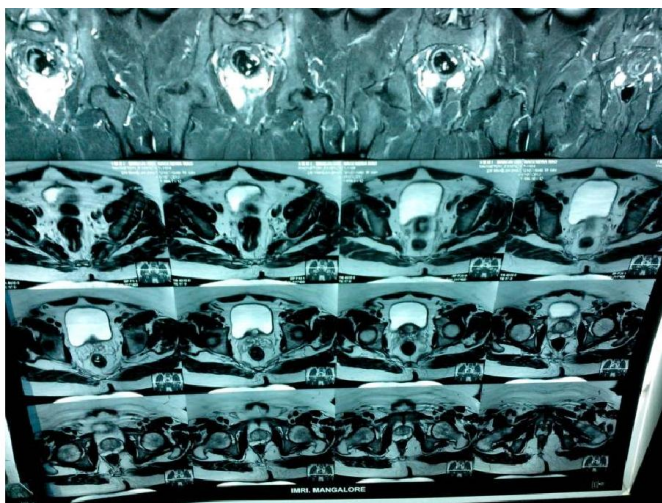
64 years old male hypertensive patient on management presented with left sided buttock and back ache on and off since 4 mths associated with walking and climbing stairs and

disturbing sleep and radiating to posterior aspect of the thigh and calf he also had low grade fever in evening and reduced appetite associated with it, pain not relieved by continuous intake of analgesics. o/e he was walking with antalgic gait, left slrt 30, left si joint deep tenderness was present, Lateral pelvic compression test, Faber test, Patrick test, Gaenslens test was positive with motor and sensory examination of lower limbs normal no history of skin rash, uveitis, occiput to wall test negative, chest expansion was also normal neither he had symptoms of early morning stiffness or other joint pain, MRI of pelvis showed narrowing of left s1 joint space with FATSAT hyperintensities in the iliac and sacral sides of the joints s/o sacroiliitis etiology infective/inflammatory, raised esr and crp with leucocytosis and lymphocytosis, CT guided aspiration of the left si joints and hpe examination showed acid fast bacilli and lymphocytes with macrophages and langhans giant cells granuloma, mantoux test positive, xray pelvis with both hips shows faint calcification and erosions of the si joints, aso titre was low, ra factor negative all this suggested a strong diagnosis of tubercular sacroiliitis and the patient was started on akt and rest following which 1mth follow up his pain has reduced and also overall health has improved 3 mth follow up he is walking without any support and esr and crp has come down within normal limits, 6 mths follow up he is completely relieved of his pain and persuing all his day to day activities

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Pretreatment x ray showing haziness of left si joint suggestive of sacroiliitis



Mri showing left sacroiliitis infective/inflammatory?? Cause



Post treatment x ray at 3 mths

## DISCUSSION

In sacroiliac tuberculosis, the onset of symptoms is generally insidious, and not accompanied by alarming general manifestations such as fever, night sweats, toxicity, or extreme weakness. Although clinical and radiological findings, laboratory data, and aspiration cytology may be suggestive, the definitive diagnosis of sacroiliac joint tuberculosis can be established by the identification of *M. tuberculosis* bacilli or the histopathological examination of the curettage material. Early osteolytic destructive lesions are cardinal radiographic signs, magnetic resonance imaging is the most sensitive and specific imaging modality for diagnosing sacroiliitis at an early stage. Most patients with sacroiliac inflammation have low back pain, sciatica, buttock pain, and difficulty walking. Sacroiliac joint infection must be included in the differential diagnosis of lower back pain and meticulous history and clinical evaluation of the joint are essential.

## Conclusion

In a patient presenting with a unilateral destructive sacroiliac lesion, tuberculosis should always be in the differential diagnosis along with psoriatic arthropathy, Reiter's syndrome, and rheumatoid arthritis. The classical presentation of ankylosing spondylitis is that of bilateral, symmetric involvement of sacroiliac joints, whereas unilateral pathology is more typical of infection. Unlike pyogenic, tuberculous osteomyelitis arises insidiously, and takes a chronic course that can be destructive and resistant to control. A high index of clinical suspicion is required for an early diagnosis. In our case, subtle changes such as haziness at lower portion of left S-I joint were noted. Non-specific edema with minimal fluid accumulation adjacent to right S-I joint also made diagnosis difficult. Nevertheless, buttock pain and history anti-tuberculosis agents were the key points to aim our direction of diagnosis to tuberculosis sacroiliitis. CT-guide aspiration provides a method with minimal invasive for diagnosis.

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