

A Case Study of Infective Sacroiliitis in a Pregnant Woman

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ABSTRACT

Sacroiliitis is a painful condition where either one or both of the sacroiliac joints become inflamed¹. The prevalence of sacroiliitis associated with pregnancy is poor, with considerable morbidity and mortality associated with it. Due to its nonspecific clinical characteristics, prompt diagnosis of the disease is confounding². A 27 year old female patient on her 34th week of gestation admitted to hospital with chief complaints of pain in the lower back since 3 months and pain radiating to both lower limbs. The ESR and CRP value were highly elevated. The magnetic resonance imaging (MRI) scan of Lumbar Spine with whole spine revealed Infective sacroiliitis. Early diagnosis and appropriate treatment improved patient care. Even in low-risk women who present with debilitating pelvic pain in pregnancy, infectious sacroiliitis should be considered as a differential diagnosis and medical treatment should not be delayed².

Keyword: Infective Sacroiliitis, MRI, Pregnancy, Sacroiliac Joint

INTRODUCTION

Sacroiliitis is an infection of the lower spine and pelvis of one or both of the sacroiliac joints. Sacroiliitis can cause pain in the lower back or buttocks and may spread down one or both of the legs. Sacroiliitis can be difficult to diagnose since other types of lower back pain can be mistaken for it. It is associated with a group of diseases that cause inflammatory spine arthritis. During pregnancy, the pelvis and sacroiliac joints undergo significant changes

that affect the dynamic stability of the pelvis. The sacroiliac joint's role is to decrease pelvic stress caused by weight changes due to body movements. Hormonal pregnancy effects cause the ligaments supporting the sacrum and the pelvic bones to relax. Sacroiliitis in pregnancy is believed to be associated with microscopic areas of joint surface injury produced by the changes during pregnancy.

CASE REPORT

A 27 year old female patient on her 34th week of gestation admitted to hospital with chief complaints of pain in the lower back since 3 months and pain radiating to both lower limbs. No history of fever, weakness, numbness or trauma. On examination the patient was conscious, oriented and febrile. Tenderness over lumbar spine was present. On general examination all the values were normal. On laboratory investigation the ESR was highly elevated (120mmhr), the haemoglobin was slightly reduced (10.2gm%). The LDH level was 109 U/L, which is lower than the normal level. In serology, the CRP level was high, 39.60mg/l. Doppler parameters are in normal limits. MRI Lumbar Spine with whole spine screening showed:

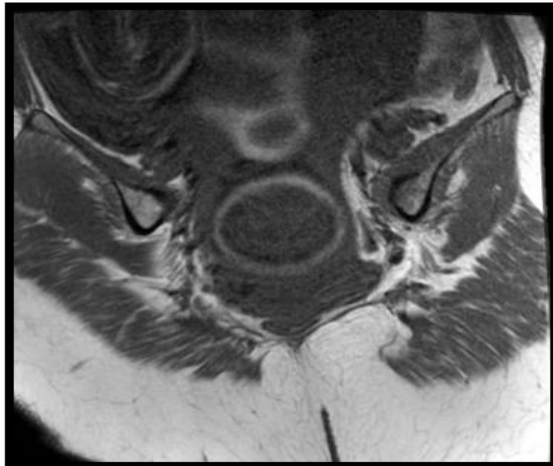
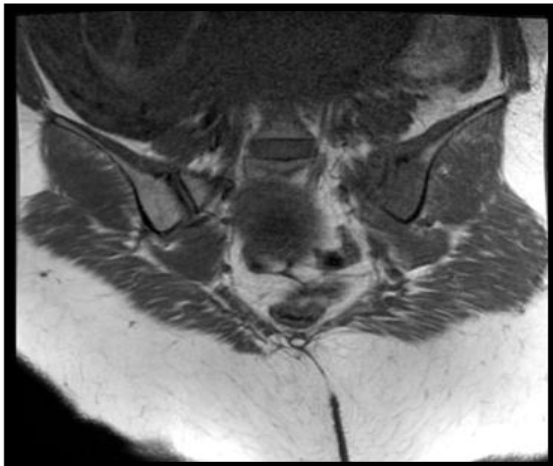
- **SJ joint screening:** diffuse T1 hypointense/ STIR hyperintense marrow edema noted across left SI joint with a large erosion in the sacrum. Diffuse cortical thinning of the iliac aspect of

left SI joint also noted. A tiny 1cm collection is noted adjacent to the joint

- Diffuse bone marrow oedema across the left SI joint with erosion and cortical

thinning as described – suggestive of “infective sacroiliitis

- Minor L4 –L5 disk bulge and cervical disk bulges, otherwise no significant spinal abnormality detected.



Patient started on antibiotic inj. Cefazolin 500mg for 4 days of admission, inj. Paracetamol 1gm given intravenously three times a day and treated conservatively. Patient condition improved symptomatically. Tab. Cefuroxime 500mg bd given for 7 days, tab.paracetamol 650mg bd for 5 days as discharge medication. Patient admitted after 3 weeks with labour pain and had vaginal delivery.

DISCUSSION

Infection of the sacroiliac joint is considered rare and is typically associated with trauma, illicit drug use or underlying illnesses. There was an unremarkable previous background in our patient’s case and she denied a background of trauma or

substance abuse. The presence of non predisposing conditions of sacroiliitis and non specific clinical presentation can delay the diagnosis especially given that lower back pain is a common symptom in pregnancy and post partum^{3,4}.

A degree of clinical suspicion is required for the diagnosis of infective sacroiliitis during pregnancy and should be verified by imaging diagnostic methods. Normal images of early disease can be provided by plain radiography. Blurring of joint margins, expanded joint spaces or particular erosion can occur⁵. Radio isotopic bone scans have high precision and sensitivity for localising inflammation of bone but during pregnancy they should not be used. MRI is the possible technique of

choice for imaging diagnosis of infectious sacroiliitis in pregnancy⁶. We done MRI on the first day of admission and thus it made the diagnosis easy and faster. The MRI of this patient showed Diffuse Marrow oedema across left SI joint with erosion and cortical thinning: suggestive of Infective Sacroiliitis⁴.

The most common explanation for infectious sacroiliitis is Staphylococcus Aureus. As the substance couldn't be sampled we couldn't locate the infectious agent in our case. Sacroiliitis can result from other condition such as Brucellosis or Tuberculosis. Infectious sacroiliitis can also be responsible for embolic septic events in bacterial endocarditis settings. In our case both this factors were omitted⁶.

The treatment for pregnancy related sacroiliitis is same as of non pregnancy related cases. In most treatment recommend 4-6 weeks of parenteral antibiotic therapy. Our patient was also treated with parenteral antibiotics during hospitalization and changed the dosage into tablet after discharge⁵.

CONCLUSION

Rare sacroiliitis should be considered in patients with radiating lower back pain even if no predisposing factors are found. The serious complications can result from delaying diagnosis and lack of therapy. Complications of infectious sacroiliitis include not only destruction of bones and joints but also maternal and neonatal septicaemia. Prompt diagnosis and treatment can prevent the mother and foetus from experiencing life threatening complications

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