

Sacroiliitis in the Post-Operative Period: A Rare Complication in A Young Female Following Ectopic Pregnancy Surgery : A Case Report

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ABSTRACT:

Sacroiliitis, the inflammation of one or both sacroiliac joints, often leads to lower back pain and leg discomfort. Its diagnosis is complicated due to the SI joint's complex anatomy and function. A 20-year-old female patient with a history of laparoscopic surgery for ectopic pregnancy and a previous cesarean delivery presented with bilateral lower limb weakness, sacral pain, left leg parasthesias, and constipation. MRI revealed increased STIR signal intensity in the left sacroiliac joint, confirming left-sided sacroiliitis. The patient was managed conservatively with a regimen of corticosteroids, non-steroidal anti-inflammatory drugs, and other supportive medications. This case highlights the importance of considering sacroiliitis in patients with post-surgical or pregnancy-related lower back pain and the role of imaging in diagnosis.

KeyWords: Sacroilitis, Ectopic pregnancy, STIR(signal intensity in ala of sacrum).

INTRODUCTION:

An inflammation of one or both of the sacroiliac (SI) joints is called sacroiliitis, and it usually causes lower back pain that radiates down the legs. because of its complex ligamentous construction, nerve innervation, and function in shifting weight from the upper body to the lower limb,. SI joint pain can be challenging to diagnose and treat. It can be caused by sacroiliac joint dysfunction(SIJD) and triggered by trauma, pregnancy, stress, lumbar fusion surgery, infection, bone grafts near the sacroiliac joint[1]. Pregnancy-related lower back pain and buttock discomfort is widespread and frequently nonspecific, so if it appears during pregnancy, it could be difficult to diagnose[2]. A history of LBP during a prior pregnancy, low age, multiparity, pelvic trauma, and chronic LBP are risk factors for LBP. Less than 20 cases of pregnancy-associated sacroiliitis having occurred during pregnancy, the puerperium, or following an abortion have been documented in the literature, indicating a low occurrence. One possible explanation for the pathophysiology of pregnancy-associated sacroiliitis is that the pelvic ligaments loosen during pregnancy, increasing pelvic motions and causing microtrauma to the joint surface[4]. Inflammatory bowel illness, ulcerative colitis, gout, and Crohn's disease can all be linked to sacroiliitis. There are various methods for diagnosing joint inflammation. Simple radiography and

other imaging methods can reveal ligament stiffening, fusion, bone degradation, and joint space shortening. A poorly identified and untreated case of sacroiliitis can develop into a chronic condition[3].

CASE PRESENTATION:

A 20 years old female patient, was admitted to Neurosurgery Department with the principal complaints of weakness of bilateral lower limbs associated with pain in sacral region, parasthesias in left lower limb, patient was unable to walk, constipation. The patient had a history of laproscopic surgery for ectopic pregnancy, during which the right fallopian tube was removed. The patient pregnancy history includes a lower segment caesarean birth of a baby girl. Following the laproscopic surgery, the patient experienced a gradual onset of pain on the fifth post-operative day. The physician initially suggested an MRI- LUMBAR SPINE which revealed a increased Short Tau Inversion Recovery(STIR) signal intensity in ala of sacrum and iliac bone on left side in inferior aspect of left sacro iliac joint(left sacrolitis), focal kyphotic deformity at L4-L5, characterized by a loss of normal posterior concavity with associated effacement of the central thecal sac. The patient was diagnosed with Left Sacrolitis. Other lab investigations such as Complete Haemogram, Liver function test, CRP, ESR, Complete Urine examination, Thyroid profile, Abdominal ultrasonography. The patient laboratory investigations were shown in table.1 The increased STIR signal intensity in ala of sacrum and iliac bone on left side in inferior aspect of left sacro iliac joint were presented in figure.1

Treatment advised:

The patient was managed conservatively with appropriate medical treatment and supportive care. The treatment regimen includes 4mg of Decadron IV BD, 30mg of Ketorolac IV BD, 1.5g of Zostum IV BD, 40mg of Pantop IV OD, 1Amp. Tramadol with 100ml NS IV TID, Tab. Chymoral forte TID, Tab. Defcort 6mg P/O BD, Tab. Hifenac-MR P/O BD. The patient was advised to follow a soft liquid diet.

DISCUSSION:

Sacroilitis is the inflammation of the joints between the lower spine and pelvis, leading to the pain in the lower back and often radiating down the legs[1]. A 20 years - old female patient presented with the clinical manifestations of weakness of bilateral lower limbs associated with pain in sacral region, parasthesias in left lower limb ,patient was unable to walk , constipation. The patient reported a history of laproscopic surgery for ectopic pregnancy,during which the right fallopian tube was removed. The patient pregnancy history contains a lower segment caesarean birth of a baby girl. The laproscopic post operative care, patient faced a gradual onset of pain on the fifth post operative day. Sacroilitis discomfort may arise with an ectopic pregnancy because the physical strain and hormonal changes of pregnancy, especially an ectopic pregnancy, can strain the sacroiliac joints, causing pain and inflammation in the lower back and buttocks. A 20-year-old female patient with a history of infections. Even so, The graphic depicts the process of identifying evidence. A painful infection of the sacroiliac joints, which is difficult to detect. And diagnostic evaluations, including MRI - LUMBAR SPINE and ULTRA SOUND SCAN OF ABDOMEN verifications, have revealed it in the patients; see the images. Pain is addressed in the conservative treatment of sacroiliitis using manual manipulation, physiotherapy, activity modification, and oral medications, which are usually nonsteroidal anti-inflammatory drugs. Massage and yoga are said to ease the ache[3]. Prescribed medications for the patient includes inj. Decradon -4mg, inj. Zostum -1.5mg, inj. Pantop- 40mg, inj. tramadol -100ml Ns, tab. Chymoral forte, tab Defcort, tab. Hifenac.

Table :1 Lab investigations showing abnormal values

Tests	Abnormal value	Normal value
ESR	80mm/hr	0-15mm/hr
T.W.B.C	12,400/cmm	4000-11000/cmm
POLYMORPHS	79%	50-70%
LYMPHOCYTES	13%	25-40%
CRP	75.5 mg/l	2.0-10.0mg/l

Figure:1 Illustrate the increased STIR signal intensity in ala of sacrum and iliac bone on left side in inferior aspect of left sacro iliac joint.



CONCLUSION:

This case highlights the challenging diagnosis and management of sacroiliitis in a young female patient with a history of laparoscopic surgery for ectopic pregnancy and cesarean delivery. Sacroiliitis, while relatively rare, should be considered in patients presenting with lower back pain, particularly in the context of recent pregnancy-related changes or surgical interventions. The imaging findings, including the increased STIR signal intensity on MRI, were key in confirming the diagnosis of left-sided sacroiliitis. Conservative management with corticosteroids, NSAIDs, and supportive care proved effective in alleviating the patient's symptoms. This case emphasizes the importance of early recognition, appropriate imaging, and individualized treatment to avoid progression to chronic inflammation. It also serves as a reminder that even in young patients, conditions like sacroiliitis can arise in the post-surgical or post-pregnancy period, necessitating careful evaluation and a

multidisciplinary approach to care.

DISCLAIMER:

The items utilized in this study are widely and mostly used in our nation and research area. Since we do not aim to utilize these items as a means of litigation but rather for the advancement of knowledge, there is no conflict of interest whatsoever between the writers and makers of the products. Additionally, the research was financed by the authors' own efforts rather than the producing corporation.

CONSENT:

According to university or international standards, the author(s) have gathered and kept the patients' signed consent.

ETHICAL APPROVAL:

The author(s) have gathered and maintained written ethical approval in accordance with international or university standards.

COMPETING INTEREST:

The writers have stated that they have no conflicting interests.

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