



BMH Med. J. 2018;5(3):92-94 **Case Report**

Postpartum Sacroiliitis Due To Brucellosis

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Abstract

Septic sacroiliitis during postpartum period can be a diagnostic challenge, especially because the symptoms are usually nonspecific. A 28 year old lady presented to the orthopaedic department with complaints of left gluteal pain radiating to her lower back. She was in her third week of postpartum and had 1 episode of fever during this period. On magnetic resonance imaging she was found to have left sacroiliitis. Further investigations revealed brucella as the etiological agent. She was treated with triple regimen antibiotics and analgesics; following which she improved.

Key words: Sacroiliitis, brucellosis, postpartum

Case presentation

A young female presented to the orthopaedic department with complaints of left gluteal pain radiating to her lower back for the past 10 days. The pain was acute in onset and progressive, requiring support to walk. She had a normal vaginal delivery 3 weeks ago. About 10 days following her delivery, she had an episode of low grade fever, which lasted for a few hours and subsided by itself without medication. This was her first pregnancy and she did not have any history of hypertension or gestational diabetes. For her pain she had consulted a local doctor, who attributed it to her postpartum status, and was advised diclofenac gel for local application and oral paracetamol. However, her symptoms worsened in the following days. On examination, she was conscious, oriented and afebrile. Her vitals and systemic examinations were normal. Active straight leg raising test was possible on the left side. There was tenderness over the left hip joint with no local rise in temperature or redness. Her complete blood counts, renal and liver parameters, and electrolytes were normal. ESR and CRP were elevated (98 mm/hour and 7 mg/L respectively). Antistreptolysin- O titre, rheumatoid factor, antinuclear antibody profile and human leukocyte antigen B27 were in a normal range. Mantoux test was negative. Her urine microscopy showed 8-10 pus cells, but urine culture was sterile. Magnetic resonance imaging (MRI) of sacroiliac region was suggestive of left sacroiliitis (**Figure 1**). Brucella IgM ELISA was positive and her blood culture also grew *Brucella melitensis*. On further probing, she gave history of visiting Dubai for a week towards the end of her second trimester; and had consumed goat milk (probably unpasteurised) from a local vendor.



Figure 1: Magnetic resonance imaging showing left sacroiliitis

She was started on triple antibiotic regimen i.e. doxycycline 100mg twice daily and rifampicin 600 mg daily for 6 weeks, along with intravenous gentamicin 240 mg once daily for 10 days. She was asked to withhold breast feeding for 2 weeks and then restart, as per the advice of our neonatologist. Ibuprofen was given for pain relief.

After 1 week of therapy, her pain subsided. Renal and liver parameters were monitored regularly. By the end of her antibiotic therapy, she had very minimal left gluteal pain and her gait pattern was normal. There was no evidence of neonatal brucellosis.

Discussion

Brucellosis is zoonotic disease having a worldwide distribution. The transmission of disease to humans is by consumption of unpasteurized milk and milk products and through animal contacts. Musculoskeletal system involvement in brucellosis has been reported in one third of the patients; and about 21 - 55% of them had sacroiliitis or spondylitis [1,2].

Gluteal and lower back pains are common and often nonspecific symptoms during the pregnancy and postpartum. Postpartum back pain usually depends on postpartum uterine involution. The differentiation of sacroiliitis from pregnancy-associated arthropathy can be a diagnostic challenge. During pregnancy, the pelvic ligaments relax; but microtrauma to the joints due to increased pelvic movements can make pregnant women susceptible to transient bacteremia [3]. Neonatal brucellosis is the result of either transplacental transmission or by breast feeds [4-7].

Our patient presented in her third week of postpartum with brucella sacroiliitis. She was treated with

triple antibiotics (doxycycline and rifampicin for 6 weeks, and gentamicin for 10 days), as per the WHO recommendation. Such a regimen has been noted to have the least relapse rate [8]. Breast feeding was withheld for 2 weeks in order to reduce the risk of neonatal brucellosis. Both the mother and the child are doing well. As stated previously, the diagnosis of sacroiliitis during pregnancy and postpartum can be difficult. *Brucella sacroiliitis* is rather uncommon; with only a handful of cases being reported [9,10].

Conclusion

Sacroiliitis can prove to be a diagnostic challenge during pregnant and postpartum period. Septic sacroiliitis, especially due to brucella, is uncommon; and though physicians and orthopaedic surgeons are aware of brucella sacroiliitis, the wider medical community may be less familiar with this condition. The suspicion should arise when the patient does not respond to conventional analgesics and has difficulty in ambulation. Early diagnosis and treatment is essential to decrease the morbidity and also to prevent neonatal brucellosis. The WHO recommended triple antibiotic regimen should be followed to minimize the rate of relapse, along with temporary cessation breast feed in order to prevent neonatal brucellosis.

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