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Diagnostic Dilemma in a Primary Care Setting: Postpartum Suprapubic Pain

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ABSTRACT

Osteitis pubis is a rarely reported condition in postpartum following a normal, uncomplicated vaginal delivery. A detailed history and physical examination including the institution of appropriate management and specific diagnostic tests are needed. Suprapubic pain is a common presentation in the postpartum period, and therefore many primary care doctors may not consider the pain as a serious complication. It is crucial that primary care physicians are aware of this illness and proactively manage this condition. Unresolved, prolonged pain might create unnecessary anxiety and frustrations for both the mother and the physician. The case here has been highlighted to address the diagnostic dilemma and to increase the likelihood of a precise diagnosis, particularly in the primary care setting. In this study, a 31-year-old female patient who had been to the local community clinic many times with complaints of suprapubic pain that had persisted for 3 months since the second birth was presented. Physical examination revealed marked tenderness over the symphysis pubis with no other significant findings. Radiological images showed evidence of osteitis pubis. The patient was treated conservatively but objectively with rest, nonsteroidal anti-inflammatory drugs, and physical therapy. The condition of the patient improved with time, and the patient returned to normal daily life after 2 months. This case emphasized the importance of recognizing and making an accurate diagnosis of postpartum pubic pain in a primary care setting and instituting a proper treatment regime early and strictly.

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INTRODUCTION

Suprapubic pain during or shortly after pregnancy is not an uncommon presentation in the primary care setting, and many physicians may not consider the pain as a serious complication.^[1] The primary care physicians must be aware of the differential diagnosis and subsequent investigations of this condition. Osteitis pubis, a noninfectious inflammatory condition of the symphysis pubis, is relatively common though infrequently following a normal uncomplicated vaginal delivery. It may occur following pelvic surgery, abuse of parenteral drugs, pregnancy and childbirth, major trauma, or repeated microtrauma to the pubic region and its muscle attachments, as well as a variety of rheumatological conditions. The perplexity concerning its diagnosis, cause, and treatment can frustrate the patients. This case report aimed to share osteitis pubis and the effective management of its treatment.

CASE REPORT

A 31-year-old female patient presented with persistent nonradiating suprapubic pain 3 months after the second childbirth. The second childbirth of the patient was uneventful, with no complications, and did not involve any instrumental delivery. Three days postdelivery, the

patient experienced a persistent, localized dull aching pain over the symphysis pubis. The pain worsened on exertion, when walking for a long distance, bending forward, and climbing upstairs, causing the patient to ambulate. This persistent pain negatively impacted the quality of life of the patient, especially when the patient actively cared for her newborn. Unresolved pain prompted multiple visits to the local community clinic over 3 months. The patient was reassured of her presumed self-limiting condition without a specific treatment during those visits. Frustrated and stressed out, especially without having a working diagnosis for the symphysis pubis pain, the patient presented to an orthopedic clinic to seek a second opinion. The systemic review of the system was unremarkable.

Physical examination revealed a marked localized tenderness over the symphysis pubis with no other significant findings. Initial investigations including complete blood count test, erythrocyte sedimentation rate, C-reactive protein, and urinalysis did not show any significant findings. A plain radiograph of the pelvis showed subchondral erosive change, joint irregularity, and sclerosis (Fig. 1). A subsequent magnetic resonance imaging (MRI) of the pelvis was done instead of the X-ray (Fig. 2a and 2b).

The clinical and radiological findings for this patient's symphysis tenderness were consistent with osteitis pubis. A therapeutic regimen of regular nonsteroidal anti-inflammatory medication initiated, and the patient was prescribed regular rest and physical therapy exercises for 4 weeks. The patient also managed to get help in taking care of her newborn baby so that she could take adequate rest at home. The patient responded well to the treatment regime, and the pain of the patient subsided gradually over a month. The patient remained pain-free at 3 months of follow-up and managed to return to normal activities with no complaints.

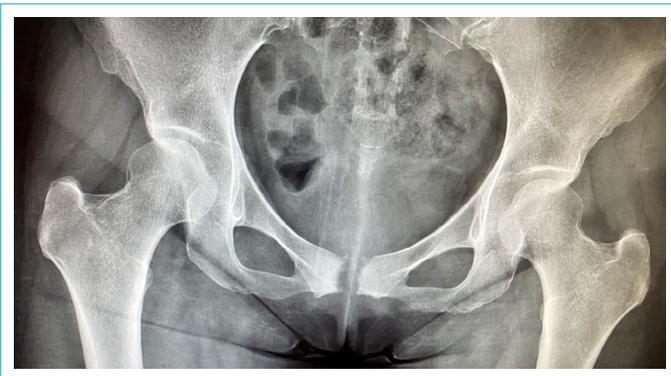


Figure 1. Pelvis X-ray. Classical findings of reactive sclerosis, widening of the symphysis pubis, bone thinning, osteolysis, and joint irregularities are demonstrated.

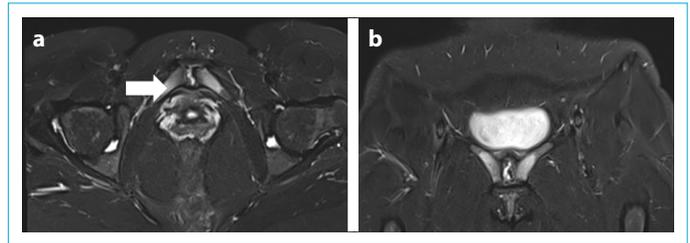


Figure 2. (a) Axial section and (b) Coronal section of MRI.

There is a short tau inversion recovery sequence showing symmetrical bilateral parasymphyseal marrow edema, fluid in symphysis pubis joint, and bony margin irregularities (white arrow). The surrounding tendon and muscles are unremarkable.

DISCUSSION

Beer, a urologist, first described osteitis pubis in 1924 as a painful complication of periostitis involving the bone of the pelvis following suprapubic operations on the bladder.^[2] It is widely accepted as a common noninfectious inflammatory condition of the symphysis pubis without a definite etiology and largely as a self-limiting disorder. There are several predisposing conditions to osteitis pubis, including trauma, urological, or gynecological procedures, rheumatologic disorders, and pregnancy.^[1] Osteitis pubis occurring after a spontaneous vaginal delivery during the postpartum period is rare, but a few cases have been described in the literature.^[3,4] Wang et al. demonstrated that serum relaxin levels were associated with peripartum separation of the symphysis pubis and suggested to use it to identify peripartum women with a high risk for pubic symphysis separation.^[5] There is a higher incidence of pelvic diastasis in nulliparous women, leading to pain, difficulty in ambulation, and urinary dysfunction.^[6] Diagnosis of osteitis pubis is usually clinical, but when inappropriately managed, osteitis pubis pain can persist, necessitating further studies to rule out other causes. The indications for imaging include persistent nonmechanical pain, severe pain despite adequate and appropriate treatment, and the presence of constitutional symptoms, neurological deficits, and bladder or bowel dysfunction.^[7] However, infective conditions of the symphysis pubis, especially pubic osteomyelitis, should be seriously considered before assuming this somewhat self-limiting condition of osteitis pubis.

Diagnostic imaging of osteitis pubis includes plain radiograph, bone scans, computed tomography, ultrasounds, and MRI.^[8] However, MRI is the most accurate as it has a superior abnormality and marrow change visualization. MRI findings in osteitis pubis include bone marrow edema, linear high T2 signal intensity in the parasymphyseal pubis, and fluid within the pubic symphysis. With chronicity, there will be radiological evidence of subchondral sclerosis, sub-

chondral bone resorption with bone irregularity, and osteophytosis or pubic beaking.

Treatment types range from conservative management to steroid injections, with the last resort of surgical treatment.

^[9] Initial treatment should reduce inflammation by rest, ice, nonsteroidal anti-inflammatory drugs, and physical therapy. If indicated, prudent use of injected corticosteroids can be tried. Rarely, surgical strategies such as curettage, arthrodesis, wedge resection, or wide resection are used. The prognosis for recovery is universally good. Therefore, an acute intervention must be directed at relieving the pain, leading to improvement within a few weeks or months.

This case report showed that osteitis pubis may occur even after 3 months postdelivery and can be chronic. In this case, the patient did not receive the much-needed regular nonsteroidal anti-inflammatory drugs, rest, and structured rehabilitative care, which explained the chronic, persistent symphysis pubis pain, delaying early full recovery. The clinical situation might be faced more frequently by primary care physicians, especially during a mother's postpartum care.

CONCLUSION

As osteitis pubis may take a longer time to resolve, this condition can pose significant frustrations and stress for patients. Primary care physicians are in the best position to manage patients with this problem by providing continued encouragement and support and education about the natural history, expectations, and treatment of the disease.

Disclosures

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