Osteomyelitis of Pubis Unusual Complication and Dilemma

Corresponding Author:  
Dr. Om P Lakhwani,  
Associate Professor, Orthopedics ESIC - PGIMSR, New Delhi, India - India

Submitting Author:  
Dr. Om P Lakhwani,  
Associate Professor, Orthopedics ESIC - PGIMSR, New Delhi, India - India

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Osteomyelitis of Pubis Unusual Complication and Dilemma

Author(s): Lakhwani OP, Ojha U, Lakhwani P, Nagaich N

Abstract

Osteomyelitis of pubic symphysis and Osteitis pubis are rare complication of surgery around inguinal and groin region. Both entities commonly confused with each other. Rarity of condition nonspecific signs and symptoms has lead to misdiagnosed, undiagnosed and delay in the management. Tubercular osteomyelitis of the symphysis pubis is very unusual and the clinical presentation can resemble osteitis pubis and osteomyelitis pubis. We have reported such unusual case and discuss early recognition of such condition and management.

Key Messages: Pain in groin and symphyseal tenderness after hernia repair warrant careful examination and skigram to rule out osteitis/osteomyelitis pubis and its prompt treatment.

Introduction

Osteitis Pubis represents a painful chronic inflammatory condition of the pubic symphysis, adjacent rami and surrounding tendinous attachments, which is non infectious and self limiting. Beer¹ (an urologist) first described this condition in 1924, in a patient who had undergone suprapubic surgery. It is also associated with urologic procedures, prostatectomy, childbirth, and can also occur in athletes.

Bony infection osteomyelitis of pubic symphysis and asceptic inflammation, Osteitis pubis are rare complication of surgery and commonly confused with each other. Tubercular osteomyelitis pubis is also rare complication and present with similar sign and symptoms.

Case Report(s)

A 60-years, male, farmer presented to us with history of operation for right inguinal hernia under spinal anesthesia 10 months back with eventless recovery and primary healing of the wound. Patient later developed swelling over the medial end of the scar, which was curetted taking as stitch abscess and non-absorption of suture material used at deeper layer during repair. Patient discharged with antibiotics and supportive therapy, after 2 months he has persistence of sinus with pain during walking and movements of the trunk and pelvis. He was advised rest. Non steroidal anti-inflammatory drugs (NSAIDs), antibiotics, avoidance of aggravating activities.

In the ensuing months, his symptoms progressively worsened. On examination pelvic compression test and bi-trochentric compression test were positive. Investigation revealed total leucocytes count 9400, erythrocyte sedimentation rate 40, plain skigram of pelvis and both hip revealed haziness irregularity and increased symphyseal width.

Patient treatment started with Intra venous antibiotics and analgesics but response was not satisfactory, since patient not responded to this regime he taken for operation under spinal anesthesia, sinus tract excised with curettage and sequestrectomy, Material sent for histopathology, which revealed chronic granulomatous inflammation of tubercular nature. Four drugs anti tubercular treatment (HRZE) were started for 4 months and 2 drugs (HR) for 5 months he responded well, with ATT relived of pain. Wound healed at one and half month further treatment was continued for 9 months to ensure eradication of disease.

Discussion and Conclusion

The symphysis pubis² is a non-synovial amphiarthrodial Secondary cartilaginous joint situated at the confluence of the two pubic bones, consisting of an intrapubic fibrocartilagenous disc between thin layers of hyaline cartilage.

Osteitis pubis is an entity characterised by pelvic pain, widebased gait and bony destruction of the margins of the pubiscsymphysis. It is a self-limiting inflammation secondary to trauma, pelvic surgery, childbirth, or overuse (usually in athletes).Osteomyelitis pubis on the other hand has the same clinical signs, but is infectious in nature. The pathogenesis³ of both is still not clear. Osteitis pubis occurs more commonly in men age 30-50years.

Delay in diagnosis is common, primarily because of the uncommonsite, rarity, and because of the difficulty
in making differential diagnosis with urological, gynaecological, and other abdominal conditions.

Osteitis pubis and osteomyelitis pubis should be considered when a patient presents with the pain, pubic tenderness, painful hip and fever. Pain occurs while walking, radiating to the perineal, testicular, suprapubis, or inguinal region. Leucocytosis, raised levels of acute phase proteins (fibrinogen, C reactive protein), and increased erythrocyte sedimentation rate may contribute to the diagnostic process. Radiographic studies reveal a fraying or roughening of the periosteum of the pubic symphysis widening of the symphysis joint space. However, x-ray signs may be delayed for as long as 4 weeks. Additional one-legged, standing flamingo views are beneficial if instability is suspected. Instability is defined as greater than 2 mm of height difference between the superior rami of the symphysis. Radionuclide scans or Magnetic resonance imaging (MRI) can be valuable adjuncts in early detection. They often reveal symmetric involvement of the pubic symphysis, in contrast to tumors, tendinitis, strains, or pelvic stress fractures, which are usually asymmetric. To distinguish between osteomyelitis and osteitis pubis, a biopsy and culture of the affected area are necessary. Needle aspiration can also help to clinch the diagnosis and provide the material for histopathology and culture sensitivity. Antibiotic treatment is essential in the management of osteomyelitis of pubis, depending on the identification of the causative agent. Initial intravenous treatment must be followed by oral treatment for at least four weeks. Surgical debridement and curettage of osteomyelitis pubis is indicated in patients with severe complications such as pelvic diastasis, bone necrosis, pelvic instability, and no response to antibiotic treatment. Rehabilitation therapy rest and time are the primary healing mechanisms provide symptomatic relief. Progressive ambulation with assistive device (e.g., cane, crutches) and possible orthoses (e.g., lumbar/sacral corset, sacroiliac belt) to unload the pelvis for pain relief and to maintain correct anatomical alignment are necessary.

References

2. Last’s Anatomy regional and applied edited by R.M.H. Mcminn pg. 414 18th edition.
Illustrations

Illustration 1

skiagram showing irregularity at pubic symphysis and widening of symphysis

Illustration 2

skiagram showing irregularity at pubic symphysis and widening of symphysis
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