

# Acute Hematogenous Pelvis And Femur Pseudomonas Osteomyelitis In A Young Healthy Boy: A Case Report

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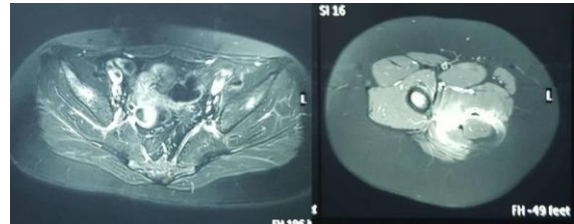
## INTRODUCTION:

Acute hematogenous pelvic osteomyelitis in children is rare (1-11%)<sup>1</sup>. Diagnosis is difficult as localizing symptoms and signs is lacking. *Pseudomonas aeruginosa* as the causative organism is uncommon, only few reported case so far<sup>2</sup>. We presented a case of *Pseudomonas* pelvic osteomyelitis in a previously healthy boy.

## CASE REPORT:

A healthy 11 years old boy was presented with constant pain over bilateral thigh and right knee for 3 weeks and refused walking. There was no constitutional symptoms. He had history of fall one week before and sustained a superficial wound at left 4<sup>th</sup> toe.

Clinically, both hips and right knee were kept in flexion and resisted any movement. There was no signs of inflammation or swelling over the thigh and hip. There was no knee effusion. He was afebrile. The white cell count, ESR and CRP was elevated (12.5, 86 and 10.1 respectively). Radiographs and ultrasound were normal. He was treated as bilateral hip septic arthritis and started empirically with cefuroxime. We proceeded with MRI (Figure 1) of pelvis and hip which suggested osteomyelitis. Blood culture grew *Pseudomonas aeruginosa*, sensitive to Ceftazidime and Amikacin. Thus, the antibiotics were changed. After two weeks, symptoms had resolved and infective markers were low. He completed two weeks of IV Amikacin and six weeks of IV Ceftazidime.



**Figure 1.** MRI of pelvis and hip showing high signal intensity on T2, reduced normal fatty marrow signal within the right femoral shaft and both ilium, suggestive of osteomyelitis. There was no abscess collection

## DISCUSSIONS:

The diagnosis of pelvic osteomyelitis is often delayed due to deep localization of infection. The only clue pointing towards infection was the elevated infective markers as ultrasound was negative. Pelvic MRI proves useful in detecting deep infection with high sensitivity and specificity<sup>3</sup>. *Pseudo. aeruginosa* as a causative agent in our patient could be explained by the traumatic wound he sustained beforehand.

## CONCLUSIONS:

Pelvic osteomyelitis should be considered as a differential diagnosis in a child presenting with bilateral lower limb pain and refusing to weight bear.

## REFERENCES:

1. Davidson D, Letts M, Khoshhal K. Pelvic Osteomyelitis in Children: A Comparison of Decades from 1980-1989 with 1990-2001. *J Pediatr Orthop* 2003;23:514-21.
2. Akhras N, Blackwood A. *Pseudomonas* pelvic osteomyelitis in a healthy child. *Infect Dis Rep* 2011 Dec 27;4(1)e1.
3. Pineda C, Vargas A, Rodríguez AV. Imaging of osteomyelitis: Current concepts. *Infect Dis Clin North Am* 2006; 20(4): 789-825