

## A Disaster. Recurrent Septic Arthritis Of The Knee Turns Out To Be Pan Osteomyelitis Of The Right Femur.

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### INTRODUCTION:

Septic arthritis is an orthopaedic emergency. Recurrent septic arthritis however always alarms surgeons and always warrants further investigations. We present a case of a recurrent right knee septic arthritis with pan osteomyelitis of the right femur.

### CASE REPORT:

40-year-old Sabahan lady presented with right knee pain and swelling for the past 3 days. She has no medical illness and denied trauma to the right knee (Figure 1). Aspiration revealed frank pus and an athrotomy washout was done. Cultures grew *Pseudomonas Aeroginosa sp.* She was discharged well on oral antibiotics.

She presented with similar symptoms a week later. She underwent a second knee athrotomy and washout yielding frank pus. She began to complain of pain and swelling over her right mid to proximal thigh. On examination the thigh was warm and swollen. Routine X-rays of the right femur revealed moth eaten appearance throughout the femur medullary canal with periosteal reaction (Figure 2). MRI was done and showed pan osteomyelitic changes throughout the whole right femur with multiloculated abscesses

The right femur was biopsied and was reported as acute on chronic osteomyelitis. There was no evidence of malignancies or tuberculosis. Thus she was planned for extensive debridement and skeletal stabilization, however the patient was not keen.

Two weeks later she complained of sudden right thigh pain while sitting on the toilet bowl. X-rays showed a right subtrochanteric pathological femur fracture (Figure 3).

She underwent an extensive wound debridement, limb reconstruction system with

antibiotic cement spacer. Entire femur was necrotic and sloughy. She is undergoing Bone transport using an LLRS.

(Figure 1) (Figure 2) (Figure 3)



**Figure 1: Initial Right Knee Xray**

**Figure 2: Right femur pan osteomyelitis**

**Figure 3: Right femur pathological fracture**

### DISCUSSIONS:

*Pseudomonas sp.* Accounts to 2% of septic joints.<sup>1</sup> Jerry R. et al report a similar case of pseudomonas infected knee that required amputation due to severe osteomyelitis despite parenteral and intrarticular antibiotics.<sup>1</sup> They recommend the usage of IV Polymyxin or gentamicin to control the infection.<sup>1</sup> A case series of pseudomonas septic arthritis revealed 9 out of 10 of them to be heroin addicts.<sup>2</sup>

### CONCLUSION:

In cases of septic arthritis with cultures growing *Pseudomonas sp.* one should be vigilant for early signs of osteomyelitis and provide aggressive antibiotic therapy as reported above.

### REFERENCES:

1. Jerry R. et al. Septic Arthritis due to *Pseudomonas aeruginosa*. JAMA. 1971; 218(4): 559-561.
2. DB Gifford, et al. Septic Arthritis due to *Pseudomonas* in heroin addicts Bone Joint Surg Am, 1975 Jul; 57 (5): 631 -635.