

Rare Complication of Septic Arthritis in Femoral Neck Fracture

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INTRODUCTION:

Femoral neck fracture is a common problem among elderly, most often as a result of low energy trauma. However septic arthritis of hip after femoral neck fracture is very rare debilitating complication.

REPORT:

76 years-old gentleman with underlying Diabetes and hypertension presented to us with femoral neck fracture following fall from motorcycle.

Upon admission we planned for bipolar hemiarthroplasty however noted patient's persistently low serum sodium which deemed unfit for surgical fixation. At first he was diagnosed as SIADH but subsequently patient has transaminitis and elevated septic parameters with increasing pain.

Further examination and imaging noted anterior chest wall abscess with concurrent collection over his affected hip. Arthrotomy washout with antibiotic cement spacer was done for the affected hip and samples consisted of pus, tissues and a bone was sent.

Intraoperatively noted osteomyelitic changes over the proximal femur with intramuscular extension of pus into surrounding areas was found.

Cultures came back for Staphylococcus Aureus for all samples taken including blood and was treated as MSSA Bacteremia with concurrent hip septic arthritis and chest wall abscess. Patient was started on Cloxacillin antibiotic for 6 weeks duration.

Eventually patient underwent repeated arthrotomy washout due to persistent discharge and collection from the affected hip while awaiting completion of antibiotics.



Figure 1: Intraoperative findings with osteomyelitis proximal femur.



Figure 2: Post-op radiograph

Hemarthrosis after femoral neck fracture can be the media for microorganism growth and infection. Local or systemic infection could also be identified as source of pathogen. As reported by Hearth et al urinary tract infection or lung infection may be the cause. In our case, we could not find source of infection.

CONCLUSION:

In essence, high suspicions of septic arthritis should be included with raised septic parameters and collections after femoral neck fracture although it is rare complication and must be diagnosed early and treated accordingly.

REFERENCES:

1. Hearth et al. Unrecognised septic arthritis following fracture of the proximal femur in patients awaiting surgery. *Injury*. 2002;**33**:457–459.