

## Salmonella Sp. Infection in Prosthetic Joint Infection of Total Knee Arthroplasty

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### INTRODUCTION:

Prosthetic joint infection remained a devastating complication in arthroplasty. However, it is rare for Salmonella Sp to be the cause of the infection. It is documented in multiple works of literature that predisposing factor in contracting such species in PJI is people with the immunosuppressive category patient such as prolonged steroid medication, patient, sickle cell anemia, diabetes mellitus, or renal failure. We presented a case of PJI of the knee due to salmonella sp. with comorbidity of a well-controlled diabetes mellitus.

### REPORT:

A 60-year-old gentleman with comorbid type-2 Diabetes Mellitus. Presented with right knee pain post-TKA 4 years. He denied any recent trauma. Pain intermittently over the medial side of the knee and aggravated by walking and standing with association with recurrent swelling. Deny any development of punctum over the right knee and fever.

On physical examination, the patient had mild swelling over the right knee and a well-healed scar of previous TKA. No open wound or sinus was seen over the knee. The right knee is warm to the touch and tender over the medial side of the knee. The plain radiograph (figure 2) showed signs of loosening with radio-lucency changes at the medial side of tibia condyle underneath the tibia component and along the medial side of the femoral component. Diagnostic aspiration yield culture result of Salmonella Sp (figure 1) and alpha-defensin test positive result. Patient's HbA1c was 7%.

### CONCLUSION:

Salmonella Sp. is a rare occurrence in a bone and joint infection and even rare in a case of PJI. Despite our patient having no predisposing

factor to contracting such a pathogen, this show that good control of Diabetes Mellitus still play a role in the risk of developing such disease.

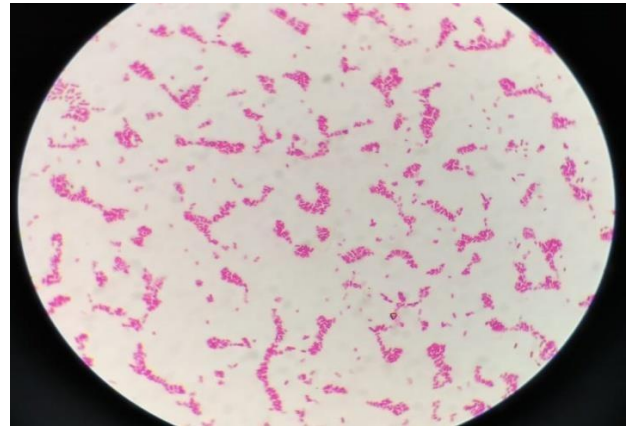


Figure 1 Salmonella Sp negative gram staining

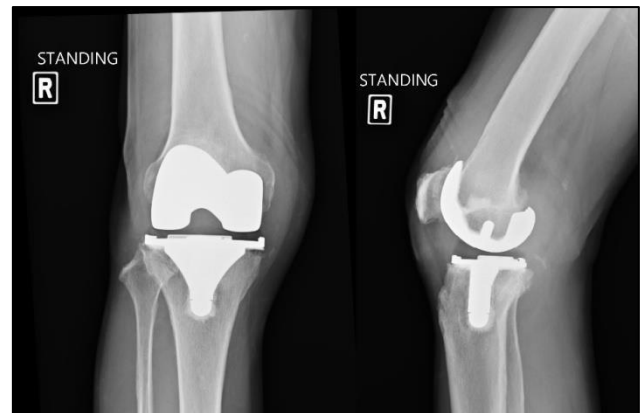


Figure 2 Pre-operative X-ray

### REFERENCES:

1. Sebastian S, Dhawan B, Malhotra R, Gautam D, Kapil A. *Salmonella typhimurium* infection in total knee arthroplasty: A case report with review of literature. J Lab Physicians. 2017 Jul-Sep;9(3):217-219