An Unusual Case of Prosthetic Joint Infection Due To *Elizabethkingia anophelis*

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INTRODUCTION:

Prosthetic joint infection (PJI) after total knee or hip replacement is a devastating complication associated with morbidity and economic cost. The treatment approach is based on different clinical situations such as patient's comorbidities, epidemic microbiology data, and surgical procedures. However, the frequency and clinical relevance of unusual pathogens at the site of periprosthetic infections and their antibiotic resistance profiles have not yet been assessed in-depth.

REPORT:

A fifty-year-old female, admitted to the orthopaedic ward of Kuala Lumpur Hospital for a persistent pain and swelling of left knee. Medical history included a left total knee replacement done 8 months ago with known allergy to nickel. Examination revealed that there is area of lucency at the femoral component of her left knee prosthesis. Laboratory data included a Erythrocyte sedimentation rate (ESR) level of 77, and a C-reactive protein level of 23.8. Knee joint aspiration was performed and a 15cc of straw-coloured synovial fluid was aspirated. Gram stain of the the synovial fluid smears showed Gram-positive bacilli, hence prosthesis was removed and replaced by a spacer. Intra operatively synovial fluid were sent to laboratory and tested for aerobic and anaerobic organisms. As the patient was apyretic, blood cultures were not performed. Intravenous Cefazolin was started until the microbiological results were available. The cultures grew *Elizabethkingia anopheles.* The presence of this bacterium in the peri-operative samples led us to consider this bacterium as the origin of the total knee prosthesis infection and its loosening. Patient was referred to Infectious Disease team and Intravenous Vancomycin was commenced for 1 month with discontinuation of Cefazolin, followed by oral Bactrim for 3 months duration.

Figure 1: Immediate post operative Radiograph

Figure 2: Post-operative 8 months Radiaograph showed area luceny at femoral component

CONCLUSION:

This case illustrates a rare occurrence of *Elizabethkingia anopheles* associated with prosthetic joint infection. An interdisciplinary collaboration between orthopaedics surgeons with clinical microbiologists and infectious disease specialists is crucial to select the most appropriate anti-infective treatment options.

REFERENCES:

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