

DOUBLE WHAMMY: PROSTHETIC HIP TUBERCULOSIS SUPERIMPOSED WITH ESBL INFECTION

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Introduction: Periprosthetic joint infection (PJI) is a devastating complication following arthroplasty. Mycobacterium tuberculosis (TB) is a rare cause of PJI. Here we describe a case of TBPJI superimposed with bacterial infection.

Discussion: 43-year old lady with rheumatoid arthritis on prednisolone and methotrexate underwent left total hip replacement (THR). 7 months later patient developed persistent hip pain and serous discharge from previous surgical wound. Radiograph showed soft tissue shadow at lateral part of hip. She underwent first stage revision surgery, where femoral stem and acetabular components were loose and pus was evacuated. Intraoperative tissue reported Extended Spectrum Beta-Lactamase Producing Klebsiella pneumoniae (ESBL) thus treated with 6-week course of intravenous meropenem. However, discharge from surgical wound persisted and computed tomography (CT) scan showed left hip recollection. Second debridement was done, where histopathological tissue sample showed granulomatous inflammation with occasional acid-fast bacilli. Patient was treated with anti-tuberculosis (TB) drugs for 12 months, after which a second-stage exchange surgery was successful. TBPJI has been scarcely reported in literature. The aetiology may include hematogenous spread, reactivation of latent disease or an undiagnosed musculoskeletal TB prior to arthroplasty. Presence of secondary bacterial infection is seen in 45.5% of cases. This may prevent early detection of TBPJI. In endemic countries, TBPJI should be suspected if symptoms persist despite antibiotic therapy. In literature, the management of TBPJI is still vague, however suggested treatment includes 12-18 months of anti-TB, followed by a two-stage arthroplasty exchange. This combination therapy has higher success rate compared to anti-TB regime alone.

Conclusion: When dealing with PJI in endemic countries, TB should be considered as one of the probable cause. A clear guideline is essential as more emerging cases are documented.