

### Free Papers A

#### [O9] EARLY PROSTHETIC JOINT INFECTION AFTER TOTAL HIP ARTHROPLASTY

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**Aim:** Early prosthetic joint infection (PJI) is a feared complication of hip arthroplasty. Debridement, antibiotics and implant retention (DAIR) is attempted to avoid removal of the implant. The aim of this retrospective cohort study was to evaluate the success rate of DAIR in early PJI.

**Method:** All patients who were diagnosed with early PJI and treated with DAIR at our center from 2003 to 2013 were included in the study. During the time period, 5176 primary hip arthroplasties and 555 revision hip arthroplasties were performed. Early PJI was diagnosed in 54 patients (43 primary and 11 revisions). Median follow-up was 5.6 years (range 2.0-12.1). Standard postoperative antibiotic treatment at our centre is vancomycin and rifampicin.

**Results:** Median patient age was 74 years and 29 patients were women. Mean C-reactive protein at time of diagnosis was 119 mg/L (range 4-546). In 41 patients the infection was eradicated with one DAIR median 17.6 days (range 5-44) after index surgery. Twelve patients underwent a second DAIR and two patients needed DAIR 3 times. Eight primary arthroplasties and two revision arthroplasties proceeded to 2-stage revision after index surgery. Two patients (revisions) were left with a spacer only and one patient was put on lifelong antibiotic suppression therapy. The most frequently isolated microorganisms were *Staphylococcus aureus* in 19 patients (35%) and Coagulase negative *Staphylococcus* in ten patients (19%) of which five were MRSE. There were no infections with MRSA in our material. Among the ten patients that proceeded to 2-stage revision, five had *Staphylococcus aureus*, three had polymicrobial flora, one Coagulase negative *Staphylococci* and one *Propionebacterium acnes* infection. The most frequently used post-operative parenteral antibiotic treatment was vancomycin in 35 patients and cloxacillin in 15 patients. The subsequent oral treatment was predominantly dicloxacillin in 25 patients and ciprofloxacin in ten patients. Twenty-four patients received rifampicin in addition. These were mainly patients operated after 2009. Intravenous antibiotics were given for median 15.7 days (range 0-60) and continued orally for median 8.1 weeks (range 0-72).

**Conclusions:** In our cohort of 54 patients, 81.4% of primary prosthesis and 63.6% of the revision prosthesis were treated successfully with DAIR. This is in accordance with previous studies.