

## Free Papers A

### [O8] EARLY SURGICAL DEBRIDEMENT IN PATIENTS WITH SUSPECTED ACUTE INFECTION AFTER HIP OR KNEE ARTHROPLASTY – SAFE, EFFECTIVE AND WITHOUT NEGATIVE FUNCTIONAL IMPACT

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**Aim:** The purpose of this study is to evaluate the safety profile and impact on functional results of surgical debridement performed in the early postoperative by comparing them with patients that undergone uncomplicated total joint arthroplasty.

**Method:** This is a retrospective case-control study. Patients that underwent debridement with prosthesis preservation for suspected acute postoperative infection of total hip or knee arthroplasty between 2010-2014 were included. Controls were randomly selected (1:2 ratio) from a list of primary arthroplasty patients in the same time period matching for articulation, age, gender, ASA score, BMI and follow-up time.

Infection status, success of treatment and medical-surgical complications were investigated and all patients were assessed using Hip disability and Osteoarthritis Outcome Score(HOOS) or Knee injury and Osteoarthritis Outcome Score(KOOS).

**Results:** Twenty-nine patients were included at a mean follow-up of 42.3 (18-66) months. Infection was confirmed in all but one patient. There was one related death (multiorgan failure) and three cases progressed to chronic infection requiring further two-stage revision – overall success rate was 86.2%. No other medical-surgical complications related to the procedure were noted.

Of the 25 that achieved infection eradication, only 19 were available to functional evaluation. Two had unrelated complications that preclude functional evaluation (one periprosthetic fracture and one contralateral amputation) and four patients died from unrelated causes (all of them without evidence of infection relapse after at least two years follow-up).

Comparing functional result of the 19 patients available with 38 uncomplicated controls, there were no significant differences between groups: Pain– 91.7±86.5 vs. 87.5±14.2; Other symptoms– 90.6±7.7 vs. 88.6±9.2; Activities of day living– 85.7±8.6 vs. 82.7±15.3; Sport– 62.3±13.2 vs. 56.6±16.1; Quality of life– 78.4±16.3 vs. 77±14.6.

**Conclusions:** Early diagnosis of acute periprosthetic infection can be extremely difficult because clinical manifestations can be very subtle. On one hand, waiting for obvious findings may delay proper therapeutic intervention leading to chronicity. On the other hand, fear of adding morbidity frequently delays decision.

The results of this study demonstrate that early surgical debridement is safe, effective and brings no long-term deleterious implications on functional results. The authors believe that when facing a complicated wound healing in early postoperative period, a low threshold to assume a possible infection diagnosis is beneficial.