

**PP-133****Preliminary results in silver-coated mega prosthesis in two-stage revision for periprosthetic joint infection in tumor reconstruction****M. De Paolis**, C. Romagnoli, M. Romantini, T. Frisoni, D.M. Donati*Istituto Ortopedico Rizzoli, Bologna, Italy*

**Introduction:** Periprosthetic joint infection (PJI) in tumor reconstruction is the most serious non oncologic complication. The incidence of infection in mega prostheses has been reported 10%. Two-stage revision is practiced to treat chronic PJI. Silver-coated mega prosthesis has been introduced in the management of revision surgery due to infection and also in primary reconstruction. Evidence reduced rate of infection in Silver-coverage on medical and orthopedic implants is noted. Aim of present study is to report preliminary results in experience with silver-coated mega prosthesis.

**Material and Methods:** 13 consecutive patients with chronic PJI underwent two-stage revision, of which four patients had a previous surgery for PJI. The average follow-up was 10 months (6-24). Mean age was 46 years (22-74). Site of infection was distal femur (5), proximal femur (3) and proximal tibia (5). All cases were managed using uniform peri-operative protocol and underwent complete explantation. Vancomycin loaded cement spacer was used in the first stage. 8 patients underwent subsequent renovation of spacer, of which 2 patients required an additional change of spacer to control infection. Average bone defect was 173mm (60-290mm). A silver-coated LINK mega prosthesis was implanted in the second stage, arthroplasty in 8 and arthrodesis in 5.

**Result:** 11 patients showed no signs of infection at the latest follow up. Recurrent infection was noticed in 2 (15%) patients within 10 and 40 days of re-implantation and were successfully managed with debridement and retention of prosthesis. No episode of local argyria was observed.

**Conclusion:** Two-stage revision with silver-coated mega prosthesis represents a viable option for treating PJI in tumor reconstructions. Long term results in larger patient population are needed to confirm this mode of treatment.