

**P0331 Prosthetic joint infections secondary to shoulder surgery: an 8-year review of cases from a university hospital**

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**Prosthetic joint infections secondary to shoulder surgery: An 8-year review of cases from a university hospital.**

**Background:** Infections associated with shoulder surgery are a rare entity, around 1.1% in shoulder prosthesis and 0.26% after arthroscopy. Nevertheless, they are the most frequent cause of surgical revision in arthroplasty because of loosening, stiffness or pain.

**Materials/methods:** Records of the Bone and Joint Unit between November 2010 and October 2018 were reviewed, and patients with implant-related shoulder infection were selected for the review. Index surgery, etiological agent, comorbidities and surgical and antibiotic treatment were revised.

**Results:** During the period of the study, 329 shoulder prosthesis surgeries were performed. 10 of these patients (0.03%) were diagnosed as infected.

The isolated microorganisms were *C. acnes* (8), *S. epidermidis* (1), *M. fortuitum* (1), *E. faecalis* (1) and *M. morgani* (1). Two of the infections were polymicrobial (10%). Five out of the infections (50%) were diagnosed more than one year after the surgery.

The mean follow-up was 25.4 months (3-101 months), seven patients were cured, with no infection recurrence during the follow-up. In most of the cases, prosthesis replacement was performed (5 two stage surgery, 2 one - stage); debridement, antibiotics and implant retention (DAIR) was performed in one case and resection arthroplasty in two cases.

The comorbidities described were: two or more surgical procedures in the same shoulder, oral anticoagulation (2) and diabetes (1)

Rifampin, always along with other antibiotic, was the most frequently used antibiotic (7), followed by clindamycin (5). The mean duration of the antibiotic treatment was 46.6 days (42-60 days)

**Conclusions:** Shoulder surgery-related infections are a rare entity. Most of them were delayed ones. The most frequently isolated microorganism is *C. acnes*. A treatment that combines implant replacement with antibiotic therapy during at least 6 weeks seems to be an effective regimen for management.



