Breast implant associated-infection conservative treatment. Implant exposure is highly predictive of failure
E. Mauleon, J. Buendia, J.R. Yuste, J.L. Del Pozo* (Pamplona, ES)

Objective: Breast implants are used for breast augmentation and reconstruction after mastectomy. Infection is one of the leading causes of morbidity that occurs after breast implantation, and complicates around 2% of interventions in most case series. Surgical removal of the implant is mandatory in most cases. The goal of the present study was to retrospectively analyze if a conservative treatment based on long-term antimicrobial use could be a sure and effective alternative. Methods: Study location: Clínica Universidad de Navarra, a 300-bed University Hospital in Pamplona, Spain. Dates: January 2000 to October 2011. Study design and patients: A retrospective review of all consecutive patients diagnosed with breast implant associated infection that were treated in a conservative way was conducted. Demographic, clinical, microbiological, antimicrobial treatment and outcome data were collected. Cure was defined as clinical infection disappearance and implant retention. Results: Eighteen patients were identified. Median age at the time of infection was 46 years (interquartile range: 40 to 53). Thirteen patients had a reconstructive and five an augmentation surgery. Median implant life span from placement to removal was 307 days (interquartile range: 20 to 337). Clinical picture included fever (88%), local pain (83%), erythema (77%) and swelling (50%). Implant was exposed at diagnosis in 6 patients. Cultures were performed in 9 patients (50%). Most common isolated microorganism was methicillin-susceptible Staphylococcus aureus (44%). E. coli, Corynebacterium jeikeium, Corynebacterium pseudodiphtericum, Staphylococcus epidermidis, Prevotella bivia and Abiothrofia adjacens were involved in the other episodes. All patients were started on IV (13) or oral (5) antimicrobial therapy. Antimicrobials were administered for a mean of 89 days (interquartile range: 48 to 98). Breast implants had to be surgically removed in 8 patients (44%) because of treatment failure. Clinical cure with breast implant retention was achieved in 84% of the patients with a non-exposed implant, while 100% of the patients with implant exposure required removal. Conclusion: Not all breast implant associated infections mandate implant removal. Breast implant exposure is highly predictive of failure if a conservative treatment is intended. If implant is not exposed a conservative treatment based in long-term administration of antimicrobials could be a valuable therapeutic option.