Construction of a Full-Length Humerus Antibiotic Spacer

Shawn Terrence Yeazell¹, Natalie Lauren Clark, Fabiola C Cabanas

¹Orthopaedic Surgery, East Carolina University

Periprosthetic Joint Infection (PJI) following shoulder arthroplasty is a challenging problem with significant implications on patient morbidity and healthcare costs. Goals are to resolve the infection, improve pain, and restore function. Management strategies are evolving, with options ranging from debridement, antibiotics and implant retention (DAIR) to one or two stage revision surgery. Two stage revision with an antibiotic spacer remains a mainstay especially with more virulent organisms. These antibiotic spacers are commercially available prefabricated but are limited in the size and length options. In certain situations, a custom length is required and may need to span the entire humerus. This case review demonstrates a middle-aged patient with a distal humerus fracture fixation that became infected and seeded his shoulder. We highlight the construction and insertion of a humeral antibiotic spacer to treat the infection and maintain skeletal stability.