Reverse Total Shoulder Arthroplasty With Custom Patient-Matched Glenoid

Caroline Gutowski[1], Rohan Paturu[1], Deep Patel[2], Sydney Horenstein[2], Catherine Julia Fedorka[2]
[1]Cooper Medical School of Rowan University, [2]Cooper University Hospital

The use of computed tomography and three-dimensional printing technology has led to custom implants for the management of severe glenoid bone loss during shoulder arthroplasty. This video demonstrates an anatomic approach and implantation of a custom augmented glenoid component during reverse shoulder arthroplasty. The case presentation of a 58-year-old woman with right glenohumeral arthritis and failed bony Bankart repair is discussed. The indication for a custom patient-matched glenoid was a considerable anteroinferior glenoid defect and subluxation of the humeral head into the glenoid, for which shelf augments and wedges were inadequate. A custom reverse glenoid system and patient-specific instrumentation affords a ream-free, bone-preserving technique to minimize the loss of glenoid bone stock and improve patient outcomes.