

external rotation 57.5°. Grafts positioning was flush with the glenoid in 93% of cases, vertical positioning was excellent in 89% (3-5 o'clock).

**Conclusion:** Arthroscopic stabilization of the shoulder with distal tibia allograft augmentation is a good safety profile technique with good results at average of two years follow up.

### Distal Clavicular Osteochondral Autograft Augmentation for Glenoid Bone Loss: A Comparison of Radius of Restoration Versus Latarjet Graft

SS-03

May 18, 2017, 8:30 AM

ADAM KWAPISZ, M.D., PRESENTING AUTHOR

KELLY FITZPATRICK, D.O.

JAY COOK, M.D.

JOHN TOKISH, M.D.



**Introduction:** The purpose of this paper is to evaluate a distal clavicular autograft for suitability for augmentation of glenoid bone loss in the setting of glenohumeral instability. Specifically, we sought to compare the radius of reconstruction of this graft with that of an ipsilateral coracoid graft as prepared for a Latarjet procedure. Further, we sought to compare the articular cartilage thickness of the distal clavicle graft with that of the native glenoid.

**Methods:** Twenty-seven fresh frozen cadaver specimens were dissected and an open distal clavicle excision was performed. In addition, the coracoid process in each specimen was prepared as is described for a Latarjet coracoid transfer. In each specimen, the distal clavicle graft was compared to the coracoid graft for size and potential of glenoid articular radius of restoration. The distal clavicle graft was also compared to the native glenoid for cartilage thickness.

**Results:** In all specimens, the distal clavicle grafts provided a greater radius of glenoid restoration than the coracoid grafts,  $p = 0.00000008$ . On average the clavicular graft restored 44% of glenoid diameter, compared to 33% in the case of the coracoid graft  $p = 0.00000009$ . Glenoid cartilage averaged 1.44 mm thicker in the native glenoid compared to the distal clavicular autograft,  $p = 0.000008$ . When specimens with OA were excluded this difference decreased to 0.97 when compared to the clavicular cartilage ( $p = 0.0026$ ).

**Conclusion:** The distal clavicle autograft can restore a glenoid bone deficit of a greater radius than a coracoid as prepared for a Latarjet procedure, and provides a source of articular cartilage to the reconstruction. The articular cartilage thickness is within 1.5 mm of that of the native glenoid.

### Complications Following Anterior Shoulder Instability Treatment: Bankart Repair Versus Latarjet

SS-04

May 18, 2017, 8:35 AM

RACHEL FRANK, M.D., PRESENTING AUTHOR



BRYCE BASQUES, M.D.

TIMOTHY LEROUX, M.D.

JUSTIN GRIFFIN, M.D.

ROBERT THORSNESS, M.D.

NIKHIL VERMA, M.D.

MATTHEW PROVENCHER, M.D.

ANTHONY ROMEO, M.D.

**Introduction:** The purpose of this study was to utilize a large population cohort to compare complication and reoperation rates following the Latarjet procedure to those following arthroscopic Bankart repair.

**Methods:** Using current procedural terminology codes, a population database was used to generate a cohort of patients who underwent Latarjet and Bankart repair between 2007-2014 in the United States. Complications following surgery were identified using ICD9 codes, including deep vein thrombosis/pulmonary embolus (DVT/PE), nerve injury, surgical site infection (SSI), hematoma, capsulitis, and dislocation, while CPT codes were used to determine overall and procedure specific reoperations, including irrigation and debridement (I&D), open reduction, and lysis of adhesions/manipulation under anesthesia.

**Results:** 5331 patients who underwent shoulder stabilization procedures between 2007 and 2014 were included. 4764 patients underwent arthroscopic Bankart repair (71.6% male), 428 patients underwent open Bankart repair (68.7% male), and 139 patients underwent Latarjet (75.5% male). There were significant increases in the annual rates of both arthroscopic Bankart repair (2007: 9.4% vs. 2014: 15.8%,  $P < 0.001$ ) and Latarjet (2007: <7.91% to 20.9%,  $P = 0.016$ ), while the number of open Bankart repairs decreased (2007: 16.8% vs 2014: 11.4%,  $P = 0.002$ ). The odds of reoperation at 90-days, 6-months, and 1-year following the Latarjet procedure were 350%, 210%, and 250% greater than arthroscopic Bankart repair, respectively ( $p < 0.001$  for all). The odds of a DVT/PE diagnosis (OR 8.2,  $p = 0.02$ ) were significantly greater following Latarjet versus arthroscopic Bankart repair. The odds of a postoperative SSI, nerve injury, adhesive capsulitis, or I&D were not significantly different between patients undergoing Latarjet and arthroscopic Bankart repair.

**Conclusion:** The rate of utilization of Latarjet and arthroscopic Bankart repair has increased in the past seven years, while the rate of open stabilization has decreased. The odds of requiring a reoperation or developing any complication were greater following Latarjet versus arthroscopic Bankart repair.

### The "Safe Zone" Technique Improves Suture Placement and Accuracy During Arthroscopic Remplissage: A Cadaveric Validation of A Novel Technique

SS-05

May 18, 2017, 8:40 AM

CYNTHIA KAHLBERG, M.D., PRESENTING AUTHOR

GRANT GARCIA, M.D.

RYAN DEGEN, M.D., M.Sc., F.R.C.S.C.

