Patient Reported Outcomes of Arthroscopic Interpositional Glenoid Patch Allografting for Glenohumeral Arthritis

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All Authors declare that they have no conflicts of interest to report.
Introduction

- Glenohumeral arthritis in a young active patient presents challenging treatment options.
- Concerns about arthroplasty longevity have prompted the evolution of biologic resurfacing of the glenoid using dermal allograft.
• To report short-to-midterm patient outcomes of arthroscopic glenoid resurfacing using a soft tissue interposition allograft.
• Examine the relationship between humeral morphology and procedure efficacy.
Methods

- Between 2010 and 2019, 23 patients with a diagnosis of primary glenohumeral arthritis.
- Underwent arthroscopic debridement, microfracture, and biological arthroscopic glenoid resurfacing using an acellular dermal matrix (Allopatch HD-ConMed).
- All patients had full thickness cartilage loss of at least half of the glenoid articular surface.
Methods

- Patient satisfaction was then assessed using the ASES, SANE, and PSS scoring scales.
- Shoulder function, pain level, and use of analgesics was compared pre to post operatively.
- Results were stratified according to presence of humeral flattening on preoperative radiographs.
• Mean age was 56 (range 19 to 74).
• Mean follow up of 31 months.
• 57% of patients reported shoulder function to be improved (22%) or much improved (35%) since surgery.
Results

- Postoperative pain scores improved for 18/23 (78%), remained the same in 3/23 (13%), worsened in 2/23 (9%), compared to preoperative scores.
- Conversion to arthroplasty was performed in 9 patients (39%) at a mean of 28 months.
- Post-operative function, pain relief and conversion to arthroplasty were all negatively correlated with the presence of humeral flattening.
Chart

Number of Patients

Overall

No Flattening

With Flattening

Difference in Pain (After – Before Surgery)
Conclusion

• Biologic glenoid resurfacing remains a viable treatment option for a difficult patient population that has exhausted conservative means.

• It can offer pain relief and improved function for an intermediate time period and may serve as a bridge before prosthetic arthroplasty becomes necessary.

• Humeral flattening appears to be a relative contraindication for the procedure.