

searched the American Board of Orthopaedic Surgery Part II database to evaluate changes in treatment over time and to identify available outcomes and associated complications arthroscopic repair of SLAP lesions. The ABOS Part II database was searched for all SLAP lesions (ICD-9 codes 840.7) and SLAP repairs (CPT codes 29807) for the years 2003 through 2008. Utilization was analyzed by geographic region, and compared with regard to complications and outcomes as self-reported by candidates during the online application process. Incidence rates were also obtained based on applicant subspecialty declaration.

Results: There were 4,975 SLAP repairs, representing 9.4% of all applicants shoulder cases. Mean follow-up was 8.9 weeks due to the time-limited case collection period. 78.4% were male and 21.6% of patients were female. The rate of repair increased over the study period to 10.1% by 2008. Mean age of male patients was 36.4 years (S.D.=13.0) with a maximum of 85 years of age. Mean age of female patients was 40.9 (S.D.=14.0), with a maximum of 88 years of age. Pain was reported as absent in only 26.3% of patients at follow-up, and function as normal in only 13.1%. 40.1% of applicants self-reported their patients to have an excellent result. The self-reported complication rate was 4.4%. Declared sports medicine specialists had a higher percentage of SLAP repairs than general orthopedists, 12.4% versus 9.2%.

Conclusions: The percentage of Part II Candidates cases that are SLAP repairs is three times the published incidence supported by the current literature for subspecialty referral practice. It might be anticipated that this rate should be even lower for general orthopedists. Especially worrisome is the rate of repair in middle-aged and elderly patients. This incidence of repair is associated with a significant rate of complications and poor outcomes. Focusing on educating young orthopedists to recognize pathologic SLAP lesions from incidental degeneration of the labrum may bring the rate of SLAP repair down to the incidence rates reflected in the literature, and hopefully decrease the complication rate and improve the outcome of arthroscopic SLAP repair.

Glenohumeral Joint Pathology Associated with High-Grade Acromioclavicular Joint Separations (SS-20)
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Introduction: Arthroscopy of the shoulder is not routinely performed during reconstruction of the acromioclavicular joint (ACJ). During an open ACJ reconstructive procedure, failure to recognize and address glenohumeral joint (GHJ) pathology can adversely affect outcomes. There is no consensus in the literature regarding the need for

concomitant GHJ arthroscopy during the time of ACJ reconstruction. The objective is to determine the need for routine GHJ arthroscopy with open ACJ reconstruction procedures by retrospectively identifying the incidence and type of GHJ pathology in patients undergoing ACJ reconstruction and to determine if pre-operative MRI's are sufficient to preclude routine GHJ arthroscopy during these procedures.

Methods: 61 consecutive patients had arthroscopic evaluation of the GHJ concomitant with ACJ reconstruction surgery. ACJ injuries were graded using Rockwood's classification. Preoperative MRI's were reviewed when available. Diagnostic arthroscopy of the GHJ was performed in the beach chair position prior to open surgical treatment. If additional pathology was found, it was addressed surgically at that time.

Results: Of the 61 patients, there were 37 type III injuries, 16 type IV injuries and 7 type V injuries. There was also one type II with an associated distal clavicle fracture, and three isolated distal clavicle fractures. There were 55 males and 6 females. Average age at the time of surgery was 37.7 years. Time to surgery from date of injury was 8 days to 51 months (average 9.9 months). 17 patients had early surgery (within 6 weeks) and 44 were delayed (after 6 weeks). 11 of the patients had pre-operative MRI scans. 46% (28 patients) had GHJ pathology. There were 22 labral tears (36%) and eight rotator cuff tears (13%). There were 11 SLAP I lesions, 7 SLAP II lesions and 4 other labral tears. Two patients (3%) had instability requiring capsulolabral repair. 46% of patients with Type III ACJ injuries, 31% with Type IV lesions, and 86% of Type V injuries had associated GHJ pathology. 100% of the rotator cuff tears and 43% of the labral tears with pre-operative MRI's were detected.

Conclusion: In patients requiring ACJ reconstruction surgery for traumatic ACJ separations, diagnostic arthroscopy of the GHJ may be warranted due to the high incidence of associated pathology. Pre-operative MRI's do not preclude concomitant GHJ arthroscopy.

Subcoracoid Impingement: Factors associated with the size and location of the Coracohumeral Interval (SS-21)
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Introduction: A narrowing of the subcoracoid space may lead to mechanical conflicts that result in injury to the rotator cuff, biceps, and biceps pulley. The coracohumeral interval (CHI) is associated with age and gender but has not been standardized to size and anatomic location. The purpose of this study therefore was to determine clinical and anatomic factors associated with the size and location of the CHI.

Methods: Data were collected prospectively in 81 consecutive patients undergoing arthroscopic shoulder surgery for various pathologies. The CHI from this cohort was then compared to a cohort of 44 patients that were surgically treated for coracoid impingement with a coracoidplasty. There were 91 men and 38 women with an average age of 48.4 years old (range 15-75). The Coracoid-humeral interval (CHI) was measured on axial preoperative MRIs and was defined as the most narrow point between the coracoid and the humeral head. To standardize the CHI measurement, the interval location was evaluated in relation to the equator of the humeral head. CHI was the dependent variable and multivariate analysis was used to assess the relationship with various surgical and preoperative subjective factors.

Results: The location of the CHI was consistently just superior to the equator of the humeral head. There was no significant difference in CHI between gender, men had 12.6mm (SD3.9) vs women 11.6mm (SD3.3) ($p=0.22$; power70%). CHI did not change with age ($r=-0.047$; $p=0.63$). Patients with instability had a significantly larger CHI of 15.1mm (SD3.3) than patients without instability of 11.6mm (SD3.6) ($p=0.000$). When the CHI of the instability patients was removed from the analysis, there was no difference in the CHI across genders but age was significantly correlated with the interval size ($r=-0.215$; $p=0.01$). Patients with coracoid impingement had a significantly narrowed CHI of 9.8mm (SD2.5) versus 13.3mm (SD3.7) compared to patients without coracoid impingement ($p=0.000$). Patients with complete supraspinatus tears had significantly narrower CHI of 10.4mm (SD3.6) vs 12.2mm (SD3.5) ($p=0.04$) in those without cuff tears. ASES score was significantly associated with the CHI ($r=.381$; $p=.002$).

Conclusion: The CHI was uniformly located just proximal to the equator of the humeral head. CHI in women and men were not significantly different, but age did have an effect. Patients with instability had a significantly larger CHI than patients without instability. In our analysis those with coracoid impingement and those with complete supraspinatus tears had narrowed CHI's. Patients with a narrowed CHI had lower preoperative ASES scores. In conclusion, the type of shoulder pathology affects the CHI more than gender and age.

Arthroscopic Debridement and Capsular release of the Shoulder as a Treatment for Osteoarthritis of the Glenohumeral Joint (SS-22) Chandra S. K. Reddy, M.D., Matthew Clarke, M.D., Derek H. Ochiai, M.D., Eric J. Guidi, M.D., Robert P. Nirschl, M.D., M.S., Skye Donovan, P.T., Ph.D., O.C.S.

Introduction: In patients with osteoarthritis of the shoulder that have failed conservative treatment surgical treatment is an option. The surgical options available are total shoulder arthroplasty hemi-arthroplasty and resurfacing arthroplasty. Another alternative surgical option is an arthroscopic debridement and capsular release of the shoulder. We have been performing an arthroscopic debridement and capsular release at our institute as an alternative for patients not willing to undergo shoulder arthroplasty

Methods: We present a retrospective case series of 29 patients(32 shoulders, 3 bilateral)who underwent arthroscopic debridement of the shoulder for osteoarthritis. The patients were operated on between January 2001 - December 2008.The primary indication for the procedure was pain and stiffness. Many of the patients were offered and had refused a shoulder replacement or resurfacing procedure prior to presenting to our institute. In 24 of the 32 shoulders an auxiliary posterior portal was used which helped in excising osteophytes fro the inferior humeral head neck junction ("goat's beard"). Chondromalacia was graded on the Outerbridge grading scale, on either side of the glenohumeral joint and ranged from grade 2 to 4, with the median grade being grade 4 and the mean 3.7. Patients were examined pre and post operatively at 3 months, 6 months,1 year and the last follow up recorded. The average follow-up was 40 months. At each of these visits the Constant score was recorded, as was the Pain score and Activities of Daily Living (ADL) score.

Results: The mean preoperative constant score was 11.36.The mean post operative constant score was 26.29, with a gain of 15 points on the Constant score. The mean preoperative Forward flexion was 123.7 degrees which improved to 133 degrees. The mean preoperative Abduction was 92.6 degrees which improved to 115 degrees, an average gain of 22.4 degrees. The mean preoperative External rotation was 25 degrees which improved to 58 degrees, an average gain of 33 degrees. The mean preoperative Internal rotation was 12 degrees which improved to 40 degrees, a gain of 28 degrees. The preoperative pain score was 3, which improved to 10 on a 15 point scale (15 no pain). The preoperative ADL Score was 2.55, which improved to 6.27 on 20 point scale (20 normal ADLs).

Conclusion: On analyzing this series of patients our conclusion is that arthroscopic debridement of the shoulder has a role to play in the management of osteoarthritis of the glenohumeral joint. The most improvement was in regaining external rotation, decreasing pain which has been maintained at 40 months and improvement in the ability to perform ADLs This seems to be a viable