First-Time Shoulder Dislocation in Patients Older than 55 Years: A Retrospective Review of Both Operative and Non-Operative Treatment.

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INTRODUCTION:

Approximately twenty percent of shoulder dislocations occur in patients 60 years of age or older.[1.] Rates of recurrent dislocation are reported to be much lower in the older population, ranging from 0-31%.[3-9] In addition, shoulder dislocations in older adults are associated with a myriad of secondary injuries including rotator cuff tears as well as damage to the labrum, bony injuries including fractures of the humeral head, anterior glenoid rim, and greater tuberosity,[10-12] peripheral nerve palsies,[13] and vascular injuries.[14] The purpose of this study is to compare patients 55 years of age or older who underwent operative management for their documented shoulder dislocation to those patients 55 years of age or older who underwent non-operative management for their documented shoulder dislocation. In doing so, we hope to examine risk factors for recurrent instability, define operative indications, and evaluate operative procedures and outcomes.

METHODS:

Patients who were treated at our center from 1/1/2014 – 9/1/2022, were over the age of 55, had a documented shoulder instability event, and had a minimum of 2 year follow-up were included in this review. Chart review was conducted to determine demographic information, age at dislocation, associated injuries, instances of recurrent instability, surgical procedures, need for revision surgery, and range of motion. Patient reported outcome measures were collected via RedCap [TM] and included: American Shoulder and Elbow Surgeons (ASES), Visual Analogue Scale (VAS), Single Assessment Numeric Evaluation (SANE), and QuickDash (DASH) scores. Statistical analysis was performed by student t-test or Mann-Whitney U tests to compare groups of two and ANOVA or Kruskal-Wallis tests to compare groups of three or more. Fisher's Exact test was used to compare categorical data. A p-value of <0.05 was considered significant.

RESULTS:

131 patients (76 non-operative, 55 operative) with an average age at presentation of 67 ± 8.43 years were included in this study. There were no significant differences in sex, age at dislocation, radiologic signs of arthritis via x-ray, or laterality between groups. Differences in associated injuries identified on XR/MRI between groups included (nonop v. operative): rotator cuff tear (23 v 35), Hill Sachs fracture (23 vs 15), superior labrum lesion (SLAP))(8 v. 12), and Bankart fracture (11 vs 13). Surgical care for the operative patients included: rotator cuff repair without biceps treatment (19), reverse total shoulder replacement (14), rotator cuff repair with biceps treatment (tenotomy or tenodesis – 9), Bankart labrum repair (7), repair of greater tuberosity fracture (3), Latarjet reconstruction (2), capsular release (2), and mini-open cuff repair with biceps tenodesis (1). Significant differences in BMI (higher in operative group), pre-operative internal rotation (higher in non-operative group), and the ASES post-operative PROM (higher ASES score in operative group (88.2 v. 81.5; p=.032)) were observed between groups ($p<0.05$). There was no significant difference in VAS, SANE, and DASH scores between the two groups. There was no significant difference in the number of episodes of recurrent instability following treatment between the operative and non-operative group (3 vs 2, respectively; p=0.072).

DISCUSSION AND CONCLUSION:

Patients over the age of 55 who have a shoulder instability event present with a significant number of associated injuries. Operative management results in similar objective clinical and functional outcomes compared to non-operative management, highlighting the effectiveness of non-operative management and alignment between clinical performance and patient-perceived recovery. The decision to proceed with surgery is multi-factorial.