

RESEARCH UPDATE: LONG TERM FOLLOW-UP ON NON-OPERATIVE MANAGEMENT OF PRIMARY ANTERIOR SHOULDER DISLOCATIONS AT 25 YEAR FOLLOW-UP

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In the last two years, Hovelius et al have published two studies that examined the long term sequelae of primary anterior shoulder dislocations. Both studies were in patients that were managed non-operatively. Interestingly, both groups of patients were followed for twenty-five years.

First, a prospective, multi-center study analyzed 257 shoulders in 255 patients aged 12-40 years followed for 25 years. After 25 years, 229 shoulders were available for follow-up. Radiographic imaging was performed in 97% of those. Researchers found that 44% of the shoulders were normal radiographically. Arthropathy was mild in 29%, moderate in 9%, and severe in 17%. Of shoulders without recurrence, 18% had moderate/severe arthropathy. 39% of shoulders suffered a recurrence once or more without surgery, and 26% for surgically stabilized shoulders. Shoulders that did not recur had less arthropathy than shoulders that recurred or stabilized over time. Shoulders surgically stabilized had less arthropathy than those that became stable over time. Factors correlated with moderate/severe arthropathy were: alcoholism (all 7 with severe were alcoholics), age > 25 years old at primary dislocation, dislocation caused by high-energy sports activity, and recurrence of dislocation. Of note, researchers were unclear about how the patients were managed, either with immobilization or activity as tolerated.

The second study was from the same group of patients, but non-operative treatment was discussed and patients were measured via questionnaire and the DASH score. 43% did not redislocate and 7% did once, 14% of recurrent dislocations stabilized over time, and nearly 8% were recurrent. 27% underwent stabilization procedures due to recurrent instability. Women had worse DASH scores than men. Researchers found that immobilization with the arm tied to the torso for three to four weeks did not change the prognosis compared to those who had immediate mobilization. Researchers also propose that the prognosis for younger ages is neither very good nor very bad. They argue that most first-time dislocations should be treated non-operatively and that immediate operation to stabilize shoulders may result in unnecessary operations in up to 30% or up to 50% if shoulders that stabilize over time are included. Regarding athletic activity, they did not identify an association between athletic activity and recurrence, nor was there a difference between males and females.

References:

Hovelius L, Saeboe M. Neer Award 2008: Arthropathy after primary anterior shoulder dislocation – 223 shoulders prospectively followed up for twenty-five years. *J Shoulder Elbow Surg.* 2009; 18: 339-347.

Hovelius L et al. Nonoperative treatment of primary anterior shoulder dislocation in patients forty years of age and younger: a prospective twenty-five year follow up. *J Bone Joint Surg Am.* 2008; 90: 945-952.