

Jakobsen BW, Johannsen HV et al. Primary Repair Versus Conservative Treatment of First-Time Traumatic Anterior Dislocation of the Shoulder: A Randomized Study with 10-Year Follow-up. Arthroscopy 2007;23(2):118-123.

Design: Randomized clinical trial

Population/sample size/setting:

- 76 patients (14 women, 62 men, mean age 21) treated by 13 university-affiliated surgeons for first-time anterior shoulder dislocation in Denmark
- Eligible if age was between 13 and 39, initial dislocation with no history of previous shoulder problems, no fracture of greater tubercle, and confirmation of Bankart lesion on arthroscopy
- Of the 76 patients, 37 were injured during sports; motor vehicle accident in 8 cases; 19% had Hill-Sachs lesion and 4% had minor osseous Bankart lesion

Main outcome measures:

- Randomized to open Bankart repair (n=37) or conservative treatment (fixed sling for 2 days following diagnostic arthroscopy, n=39); all patients had nonfixed sling for 1 week
- Rehabilitation program was identical; both groups had 3 weeks of passive movement, then active internal rotation and abduction, with progress to swimming and light sports at 12 weeks and overhead sports at 6 months
- Patients examined 24 months after arthroscopy for signs of disability and Constant shoulder scores
- Patients contacted by telephone interview 10 years after arthroscopy; questionnaire was sent and Oxford self-assessment score determined
- At 24 months, 22 patients had had recurrent anterior dislocation; 21 were in the conservative treatment group and 1 in the open repair group
- Non-dislocators in both treatment groups had similar Constant scores
- At 10 years, 75 of 76 patients were reached by telephone; 12 (6 in each group) had clinical examination and medical records were checked in 20 who had recurrence of dislocation
- At 10 years, 2 additional recurrences had occurred in surgical group and 3 more in conservative group, for cumulative totals of 3 and 24 recurrences
- Among the 24 recurrences in the conservative group, 19 had Bankart repair, 17 open and 2 arthroscopic
- Recurrence risk was related to age; it was highest in the younger group (15-24), among whom 66% had a recurrence in the conservative group

Authors' conclusions:

- Open repair of first time dislocation yields superior results compared to conservative treatment, and should be considered in active patients to reduce the risk of recurrence

Comments:

- Initial evaluation included diagnostic arthroscopic lavage for all patients

- “Oxford self-assessment shoulder score” is not cited; there is an Oxford shoulder score (attached) and an Oxford shoulder instability score (attached). Presumably the latter is the outcome measure used at the 10 year follow-up
- Oxford instability score was developed partly because Constant score may be insensitive to change in shoulder instability (Dawson et al, attached)
- Some data presentation is unclear; between 24 month and 10 year followup, text reports 3 additional recurrences in the conservatively treated group, but survival curve in Figure 2 appears to display 6 additional events marked by step-downs in curve

Assessment: Adequate for some evidence that open Bankart repair of first time anterior shoulder dislocation reduces the risk of location for up to ten years, and for some evidence that the risk of recurrence is greatest in younger patients age 15 to 24