

# Should We Change the Minimum Follow Up to Evaluate Recurrences after Arthroscopic Bankart Repair?

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## INTRODUCTION:

There is a great discrepancy between the rates of recurrence reported after arthroscopic Bankart repair in relation to the follow-up time. The purpose of our study was to analyze the rate of recurrences after arthroscopic Bankart repair in the long-term emphasizing whether the minimum follow up of two years is adequate to assess this outcome.

## METHODS:

Between January 2008 and April 2013, 356 athletes underwent arthroscopic Bankart repair for anterior glenohumeral instability in our institution. Return to sports, the Rowe score, Subjective Shoulder Value (SSV), and the Athletic Shoulder Outcome Scoring System (ASOSS) were used to assess functional outcomes. We analyzed the proportion of recurrence, before and after 4 years of follow up. Additionally, we perform a Kaplan Meier curve to evaluate recurrence-free time in patients with recurrence.

## RESULTS:

The mean follow up was 10.5 years mean (SD 1.59) and the mean age was 20.8 (SD 3.9). In total, 90% of patients were able to return to sports; of these, 91% returned at their preinjury level of play. The Rowe, SSV, and ASOSS scores showed statistical improvement after operation ( $P < 0.01$ ). The proportion of patients with recurrence during the complete follow up was 25% (IC95% 20%-31%) (n=70), the mean time until the recurrence was 3.8 years (SD 2.6). In patients with recurrence only 39% (IC95% 30%-48%) occur 2 years after the surgery and 61% (IC95% 50%-73%) occur 4 years after the surgery.

## DISCUSSION AND CONCLUSION:

In our study, the effectiveness of the Bankart surgery to stabilize the shoulder decreased significantly over time. Indeed, less than half of the recurrences occurred at 2 years of follow up. Therefore, we propose that the minimum recommended follow up should be 4 years, otherwise, it is very likely that the actual rate of recurrences will be significantly underestimated.

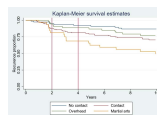
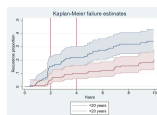
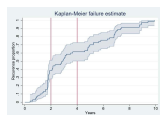
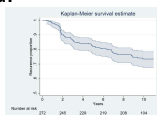


Table 1. Demographic characteristics of the study population.	
Characteristic	Value
Age (mean ± SD)	20.8 ± 3.9
Sex (Male/Female)	356/0
Level of competition	
Amateur	100
Professional	256
Time to surgery (mean ± SD)	10.5 ± 1.59
Return to sports (Yes/No)	320/36
Return to pre-injury level (Yes/No)	298/58
Recurrence (Yes/No)	70/286
Time to recurrence (mean ± SD)	3.8 ± 2.6
Recurrence within 2 years (Yes/No)	27/43
Recurrence after 2 years (Yes/No)	43/27

Table 2. Functional outcomes at follow-up.	
Outcome	Value
Rowe score (mean ± SD)	85.5 ± 10.5
SSV (mean ± SD)	85.5 ± 10.5
ASOSS (mean ± SD)	85.5 ± 10.5
Return to sports (Yes/No)	320/36
Return to pre-injury level (Yes/No)	298/58
Recurrence (Yes/No)	70/286
Time to recurrence (mean ± SD)	3.8 ± 2.6
Recurrence within 2 years (Yes/No)	27/43
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