

Outcomes of Treating On-Track and Off-Track Lesions with an Open Latarjet in the Military Athlete

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INTRODUCTION:

In the active military population, the application of the glenoid track concept was superior to using glenoid bone loss alone with regard to predicting postoperative stability following an arthroscopic Bankart repair. The open Latarjet has been shown to be an effective procedure in the treatment of anterior glenoid bone loss in the active military patient. There is a paucity of literature on the effectiveness of the Latarjet for the treatment of off-track lesions. The purpose of this study is to compare and assess the outcomes of the open Latarjet for the treatment of on-track and off-track lesions in the military athlete.

METHODS: A retrospective analysis of previously published data was performed. All glenohumeral instability procedures were reviewed at one institution from June 2014 to June 2019. The patient population consisted of active-duty military personnel with anterior glenoid bone loss, who were treated with a Latarjet. For each patient, the Hill Sachs lesion, glenoid bone loss, and glenoid track were retrospectively measured to categorize as on-track and off-track lesions. The primary outcome measure was recurrent instability. Patients were excluded if they had less than 2 years of follow up, no postoperative patient-reported outcomes, or return to military duty data.

RESULTS: Forty-seven patients were included in this study; 30 patients had on-track lesions and 17 patients had off-track lesions. The mean duration of follow up was 3.0 years. The On-Track group had 1 recurrent dislocation (3.3%) and 7 recurrent subluxations (23.3%); while the Off-Track group had 3 recurrent dislocations (17.6%, $p=0.09$) and 5 recurrent subluxations (29.4%, $p=0.65$). The mean postoperative ASES was 79.6 and 80.7 ($p=0.85$), WOSI was 711.3 and 687.7 ($p=0.85$), SANE was 82.6 and 79.7 ($p=0.51$) for the On-Track and Off-Track, respectively. There was no significant difference in time needed to pass an APFT or time spent on medical profile.

DISCUSSION AND CONCLUSION:

In the military athlete with recurrent shoulder instability who have been treated with the open Latarjet, there is no difference in outcomes between those patients with On-Track or Off-Track lesions.

Subjective Measure	Results: On Track	Results: Off Track	p-value
ASES Score post op	79.6	80.7	0.85
WOSI Score post op	711.3	687.7	0.85
SANE Score Post op	82.6	79.7	0.51

Objective Measure	Results: On Track	Results: Off Track	p-value
Time to Pass APFT	8.4 months	7.4 months	0.32
Time on Medical Profile	6.0 months	7.1 months	0.28

Complication	Results: On Track	Results: Off Track	P-value
Subluxations	7	5	0.65
Dislocations	1	3	0.09