

Infinity-Lock™ Button System Clinical Summary

Compilation of publications on the Infinity-Lock Button System

Introduction

Data from recent publications suggest that the Infinity-Lock Button System may provide good outcomes in treating acromioclavicular joint separation.

Publications

Loukovitis K. et al (2019)

- Data were collected on 30 patients implanted with the Infinity-Lock Button System (Xiros; n=15) or a Synthetic Tape with AP screw (n=15).
- Minimum follow up at 3 months.
- The outcome scores showed improvement from the pre-operative state.
- Radiological assessment at 6 weeks showed improvement in the coracoclavicular distance.
- No complications were reported.
- The results of the 2 treatments were not statistically significantly different however, the authors concluded that the results showed better early radiographic and clinical outcomes when using the Infinity-Lock Button System.

Table 1. Results Summary For Loukovitis K. et al (2019)

	Infinity-Lock Button System (Xiros)	Synthetic Tape With AP Screw
Pre-operative / Post-operative CC distance	20.1 / 12.7 mm	22.3 / 16.8 mm
Improvement in CC distance	7.4 mm	5.5 mm
CC: clavicle ratio	1.7: 1	1.8: 1
Post-operative CC: Clavicle Score (/100)	0.9: 1	1.4: 1
Post-operative ASES Score (/100)	76	77
Post-operative Nottingham Score (/100)	80	69

Chowdhury A. et al (2019)

- Data were collected retrospectively on patients implanted with the Infinity-Lock Button System (n=15) in a single UK district general hospital from May 2016 to September 2018.
- One patient was lost to follow-up.
- There were statistically significant differences between the pre- and post-operative DASH scores, and pre- and post-operative Oxford Shoulder Scores.
- Radiological assessment showed improvement in the coracoclavicular distance (mean reduction=7.79 mm (se=1.31 mm)).
- Three complications were reported. One incidence of post-operative paraesthesia (self-limiting), two failures of fixation necessitating revision surgery.
- The authors concluded that the Infinity-Lock Button System results in improved radiological and clinical outcomes in AC joint disruption and is an effective technique in the management of this condition.

Table 2. Results Summary For Chowdhury A. et al (2019)

	Pre-operative (mean, se)	Post-operative (mean, se)	P - value
DASH	74.2 (6.44)	27.0 (8.05)	p=0.0015*
Oxford Shoulder Score	44.8 (3.51)	20.75 (3.31)	p=0.0015*

* Wilcoxon Signed-Rank Test

Conclusions from the recent studies

- The Infinity-Lock Button System resulted in improved radiological and clinical outcomes following acromioclavicular joint disruption.
- Data suggests that the Infinity-Lock Button System is an effective technique in the management of acromioclavicular joint disruption.
- Further research with larger patient groups should be performed to corroborate these early findings.

Infinity-Lock™ Button System Clinical Review

Compilation of publications on the Infinity-Lock Button System

Table 3. Infinity-Lock Button System **Clinical Literature**

Year	Reference	Number of Patients	Improvement in CC distance (mm)	Post-operative Nottingham Score	Oxford Shoulder Score
2019	Loukovitis K. et al (2019)	15	7.4	8.0	X
2019	Chowdhury A. et al (2019)	14	7.79	X	40.5

Abbreviations

DASH: Disabilities of the Arm Shoulder and Hand score.

ASES: American Shoulder and Elbow Surgeons Standardised Shoulder Assessment form.

CC: Coracoclavicular.

OSS: Oxford Shoulder Score.

Study Citations

Loukovitis K, Dupley L, Sharma S, Heasley R, Jain N. A Comparison Study of the Clinical and Radiographic Outcomes of Two Techniques of Coraco-Clavicular Ligament Reconstruction for Acromioclavicular Joint. EFORT Congress, Lisbon 2019.

Chowdhury A, Kohli S, Taiwo A, Sampalli S, Elmorsy A. Clinical and radiological outcomes of the Xiros Infinity-Lock Button System, a novel suture button technique, for the management of Acromioclavicular joint disruption. EFORT Congress, Lisbon 2019.