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Arthroscopy Is An Effective Diagnostic Tool And Yields Comparable Clinical Outcomes To Open Procedures For Managing Acromioclavicular Joint Dislocation

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Faculty Disclosure Information

- Our disclosures are on disclosuresearch.aaos.org

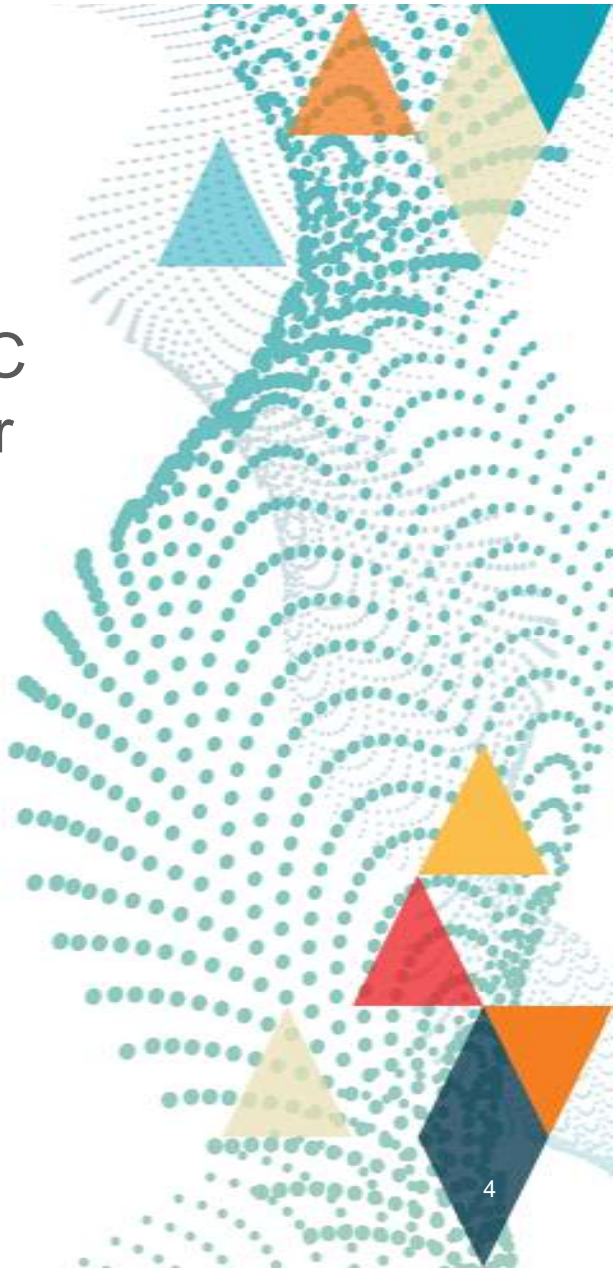
Introduction

- Injury to the acromioclavicular (AC) joint accounts for 9% of all shoulder injuries, commonly in men between the ages of 20 and 39 years
- A plethora of techniques-newer methods like arthroscopically assisted anatomical coracoclavicular (CC) ligament reconstruction with the use of button fixation are gaining popularity
- The potential superiority of an arthroscopically assisted approach needs to be determined

Aim

- To analyze the outcomes of surgical management of AC joint dislocation using either arthroscopically assisted or open procedures in a specialized sports medicine center

- To compare the clinical outcomes between acute and chronic cases



Material and methods

- Retrospective study of all patients with ACJ dislocation who underwent open or arthroscopically assisted CC ligament reconstruction from 2013 to 2022
- Clinical and functional outcomes assessed postoperatively using the Subjective Shoulder Value (SSV) and Visual Analogue Scale (VAS) for pain scores
- Complication and reoperation rates

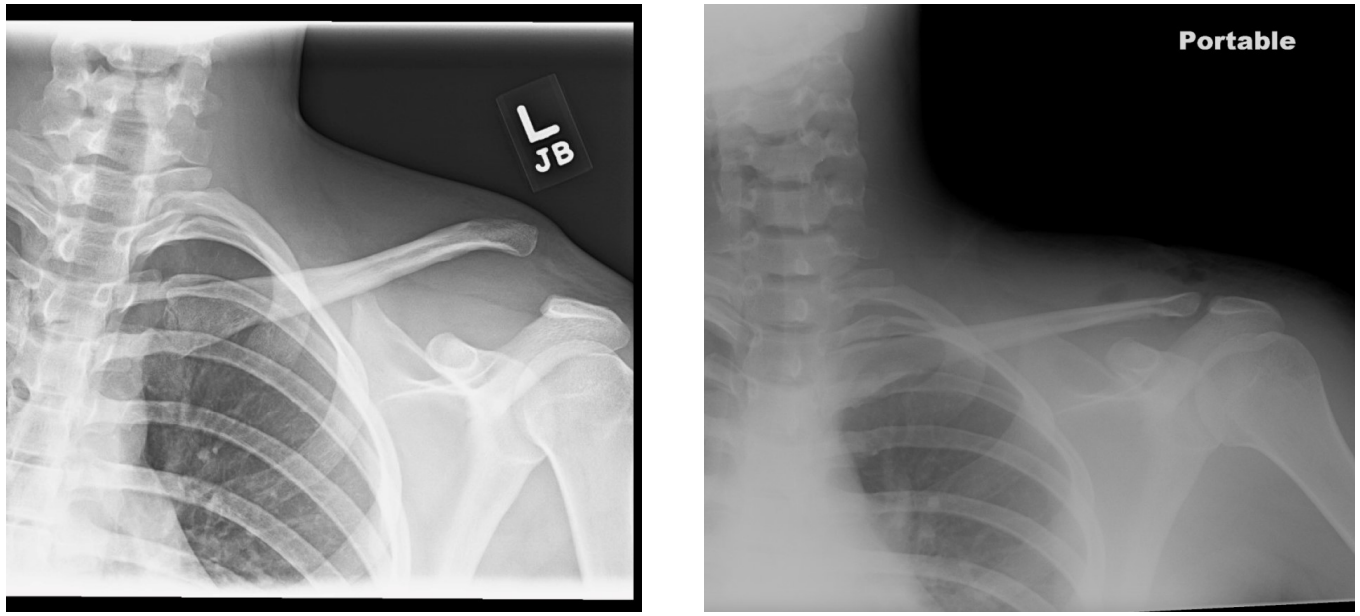
Results

	Acute (n=18)	Chronic (n=23)	p-value
Sex (M/F)	11/7	21/2	-
Age (years)	31.7 (16-50)	37.6 (19-66)	.16
Follow-up (months)	33.1 (12-92)	33.3 (12-131)	.97
Time to OR (days)	15 (4-21)	712 (35-3207)	-
SSV	82.6 ± 8	80.4 ± 7.3	.7
VAS for pain	0.9 ±0.8	1.8 ± 1	.2
Complications	5 (27.7)	7 (30.4)	.85
Reoperations	2 (11.1)	4 (17.3)	.57
Arthroscopically assisted	12 (66.6)	15 (65.2)	.92
Distal clavicle excision	7 (38.8)	16 (69.5)	**.049**

Results

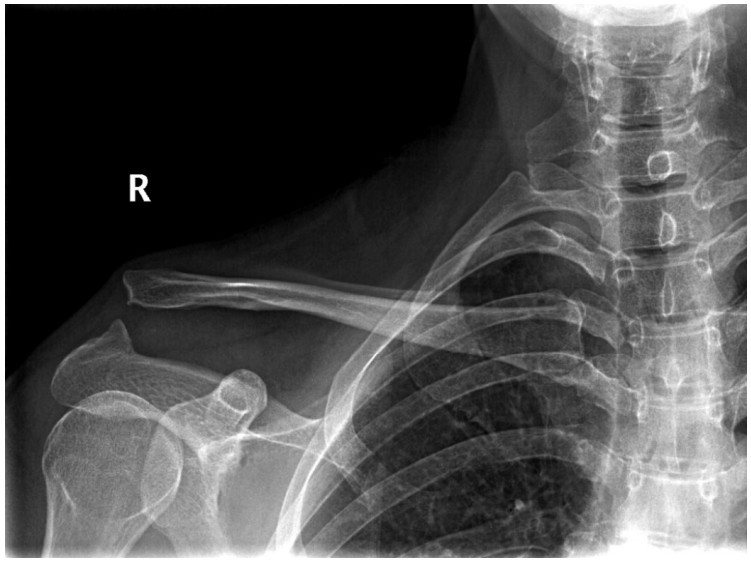
	Arthroscopically assisted (n=27)	Open (n=14)	p-value
SSV	81.6 ± 7.1	80.7 ± 9.5	.89
VAS for pain	1.6 ± 0.9	1.1 ± 0.8	.44
Complications	7 (25.9)	5 (35.7)	.51
Reoperations	2 (7.4)	4 (28.5)	.069
Concomitant injuries diagnosed intraoperatively	15 (55.5)	0 (0)	**<.05**

Case 1



Radiographs of 17 year-old female patient, acute type V dislocation, preoperatively and 2.5 years postoperatively

Case 2



Radiographs of 50 year-old female patient, acute type V dislocation, preoperatively and 1.5 years postoperatively

Conclusions

- ✓ No statistically significant difference in clinical outcomes between open and arthroscopically assisted procedures
- ✓ Arthroscopically assisted may have the ability to identify concomitant injuries not initially diagnosed
- ✓ In chronic cases, surgeons should be aware that distal clavicle excision may be necessary to reduce the ACJ adequately
- ✓ Our study underscores the need for prospective multicenter research to further evaluate these procedures and their outcomes

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