



Arthroscopic Margin
Convergence Rotator Cuff Repair
Without Suture Anchors
Outcome and Prognostic Factors

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# Disclosures:

- Ali could you please complete



### Background

- Limited data on use of margin convergence without the use of suture anchor
- Margin convergence repairs rotator cuff by side-to-side suturing in the anteriorposterior direction to restore anatomy and bring cuff to bone bed
- Rotator cuff repair under less tension with margin convergence technique

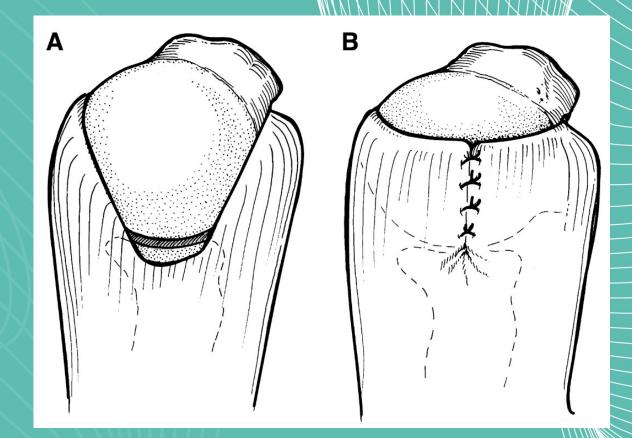


Figure 1: Concept of margin convergence repair without suture anchor. A) U-shaped tear in rotator cuff. B) Rotator cuff repair using margin convergence technique

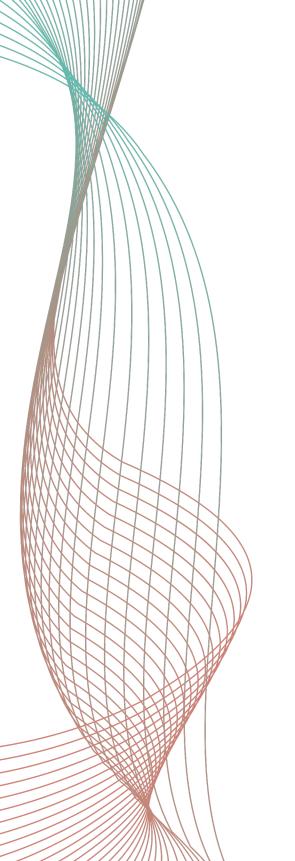


#### Methods

- Study Design: Retrospective cohort Study
- Study Setting: Patients who underwent margin convergence rotator cuff repair without use of suture anchors by a single surgeon in Northeast United States





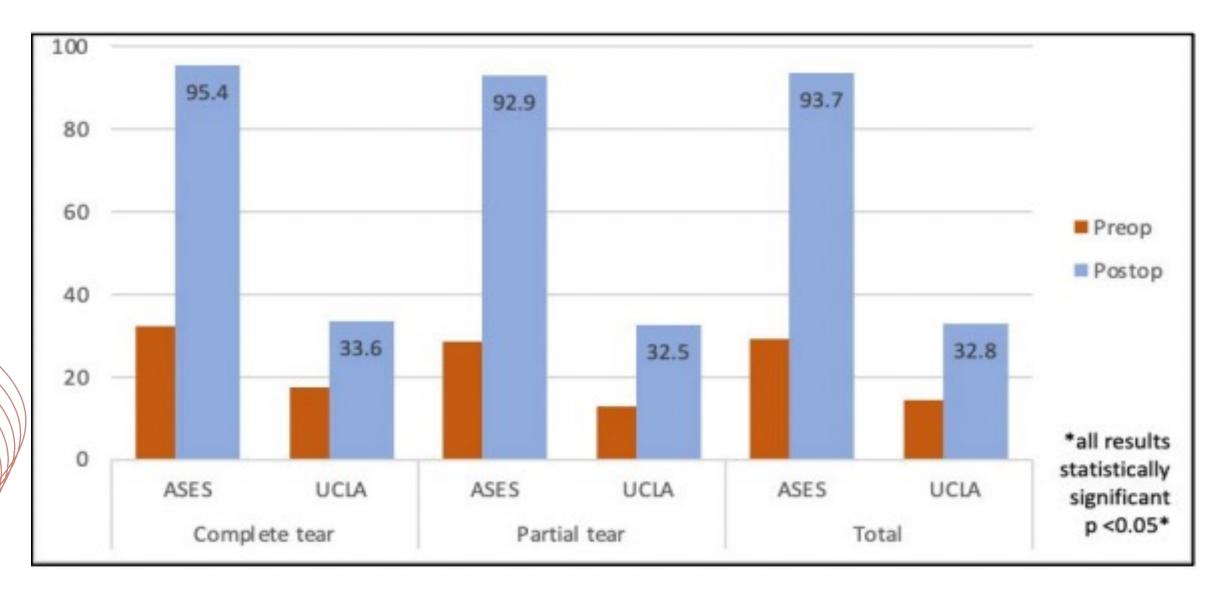


## Characteristics of Study Population

Total Rotator Cuff Tears	38
Complete Tear	26
Partial Tear	12
Average Age (years)	62 ± 15.1
Average Follow-Up (months)	33.9 ± 12.4



### Clinical Outcome Scores





## Sub-analysis

	Grade 1-2 Retraction	Grade 3-4 Retraction	P-value
Post-op ASES	95.2	87.1	0.033
Post-op UCLA SS	33.5	30.1	0.02

	Non-U-shaped Tear	U-shaped Tear	P-value
Post-op ASES	95.6	90.5	0.047
Post-op UCLA SS	33.6	31.6	0.05



#### Conclusion

- Arthroscopic margin convergence without the use of suture anchors is suitable technique in patients with partial or complete rotator cuff tears
- Retraction grade ≥ 3 and U-shaped tearing related to lower clinical outcome
  - Reasonable improvement in outcome of these patients



#### Resources

- Burkhart SS, Danaceau SM, Pearce CE. Arthroscopic rotator cuff repair: Analysis of results by tear size and by repair technique-margin convergence versus direct tendon-to-bone repair. *Arthrosc J Arthrosc Relat Surg Off Publ Arthrosc Assoc N Am Int Arthrosc Assoc*. 2001;17(9):905-912. doi:10.1053/jars.2001.26821
- Burkhart SS, Athanasiou KA, Wirth MA. Margin convergence: A method of reducing strain in massive rotator cuff tears. *Arthrosc J Arthrosc Relat Surg*. 1996;12(3):335-338. doi:10.1016/S0749-8063(96)90070-5

