

# ALPSA Lesions Are Associated with High Rate of Early Repair Failure

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## INTRODUCTION

- Anterior labroligamentous periosteal sleeve avulsion (ALPSA) lesions :
  - Occur more frequently in patients with recurrent shoulder instability
  - Associated with higher rates of failure after capsulolabral repair surgery compared to typical Bankart lesions
- Relatively limited data to understand the associated injuries and postoperative course in patients with ALPSA lesions
- The primary research questions were:
  - What are the injury patterns and other patient features most commonly associated with ALPSA lesions?
  - What is the postoperative course and what are the expected 5+ year outcomes after repair for ALPSA lesions?
  - Can this information be used to guide treatment and/or counseling for patients with ALPSA lesions?

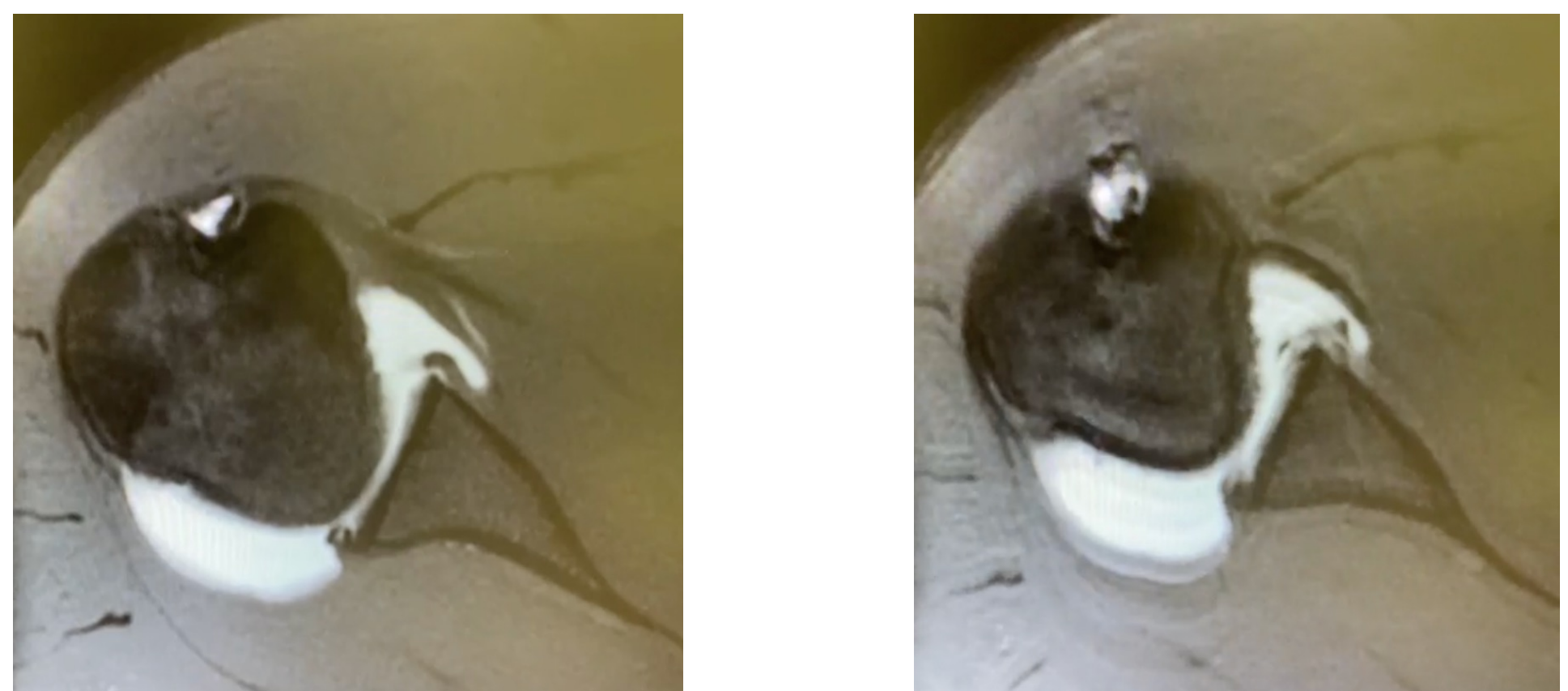


Figure 1. MRI arthrogram axial images demonstrating sequential cuts of an ALPSA lesion

## METHODS

- Patient population:
  - Patients who underwent arthroscopic shoulder stabilization by either of two fellowship trained sports surgeons at a single facility between January 2010 and December 2015
  - Minimum follow-up of five years after index surgical repair
  - Presence of an ALPSA lesion as identified on arthroscopic exam
- Collected demographics, injury mechanism, ISI scores, symptoms and instability history, imaging, and intra-operative features
- Failure = any recurrent shoulder instability events including subjective subluxation and dislocation, recurrence of pain consistent with instability, or functionally limiting apprehension.

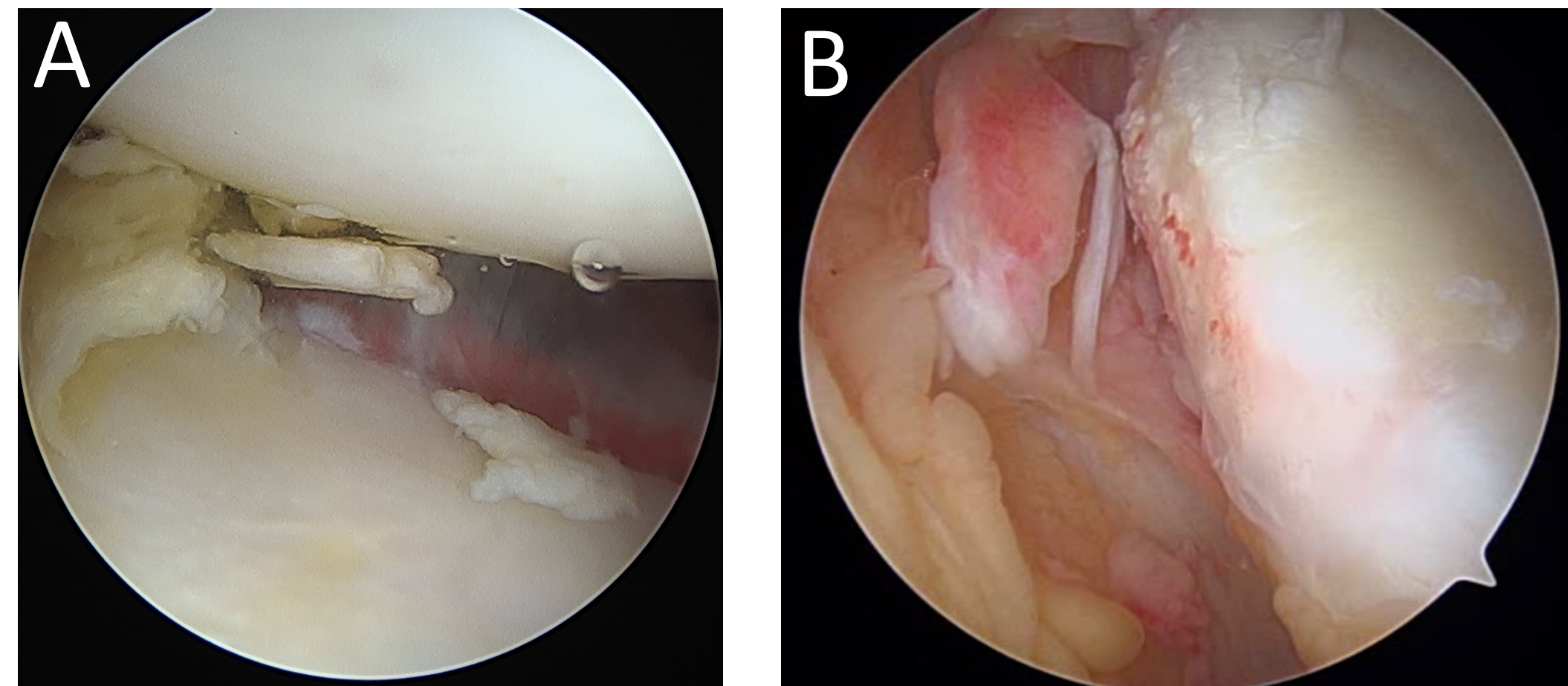


Figure 2. Arthroscopic images at the onset of arthroscopic labral repair for ALPSA lesion taken from (A) the posterior viewing portal and (B) the anterior superior portal

## METHODS

- Outcome Measures:
  - Rates of associated intra-articular shoulder pathology on MRI or at the time of surgery
  - Rates of failure and time of failure/recurrence
- Analysis
  - Survival analysis for longitudinal outcomes

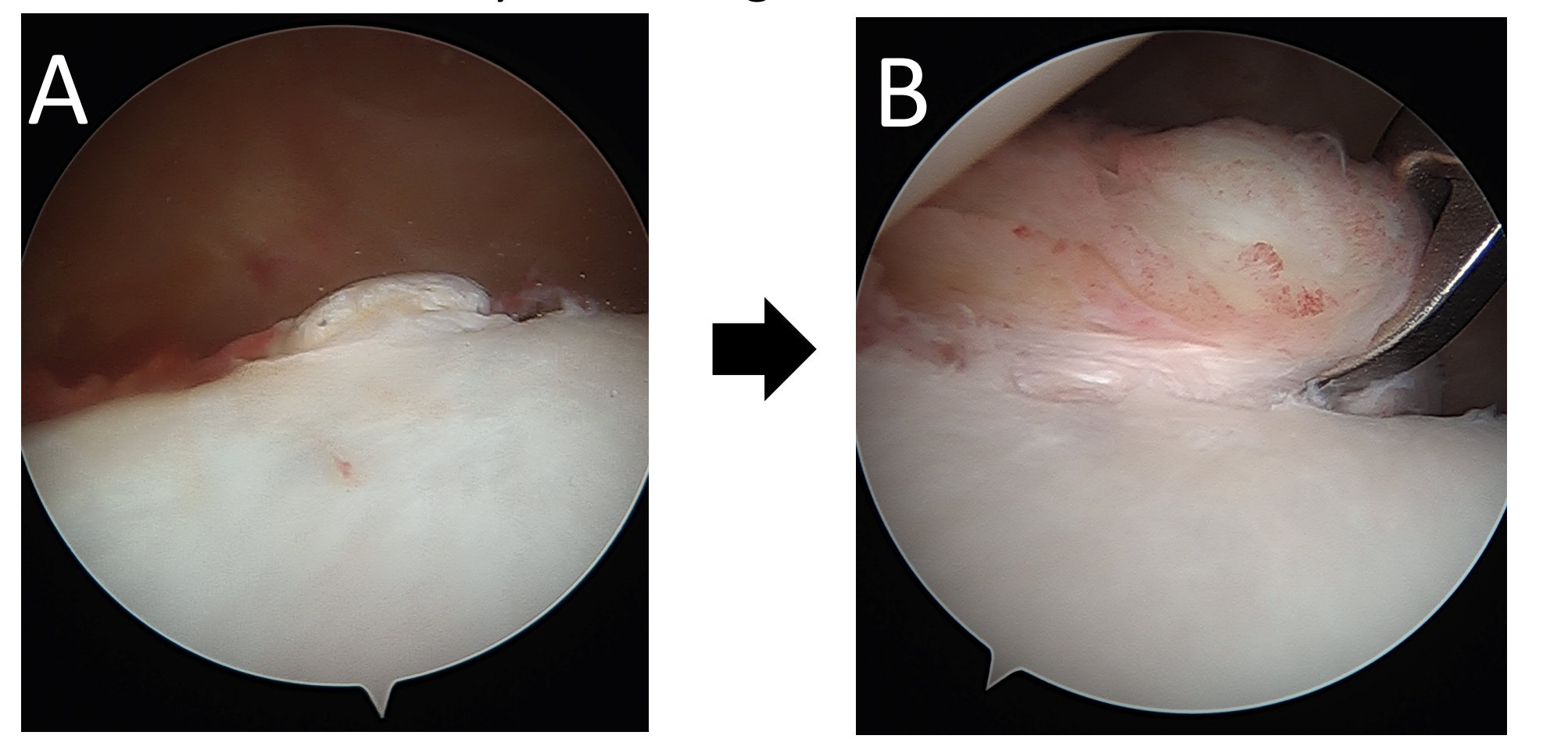


Figure 3. Arthroscopic images demonstrating (A) medialized labrum, (B) mobilized labral tissue retracted to the appropriate position laterally on the glenoid face, and (C) the repaired ALPSA lesion

## RESULTS

Patient / Demographic Factors	Factor	Median (IQR)
	Age at Surgery (Years)	20.1 (19.6-22.0)
	ISI Score	5 (3-5)
	Instability Events	3 (2-4)
	Time Injury to Surgery (Months)	6.7 (3.2-23.6)
Preoperative Symptoms	Factor	N (%)
	Instability	46 (100%)
	Pain	44 (96%)
Concomitant Pathology	Factor	N (%)
	Posterior Labral Tear	11 (24%)
	SLAP Tear	11 (24%)
	GLAD Lesion	5 (11%)
	HAGL Lesion	0
Tear Size / Treatment	Factor	Median (IQR)
	Tear Size (Hours)	3.5 (3-4)
	Anterior Anchors	4 (3-4.75)

- Eight failures at median 15.1 months post-index procedure
- 75% of failures occurring before two years
- High rate of failure after revision repair (3/8, 37.5%)

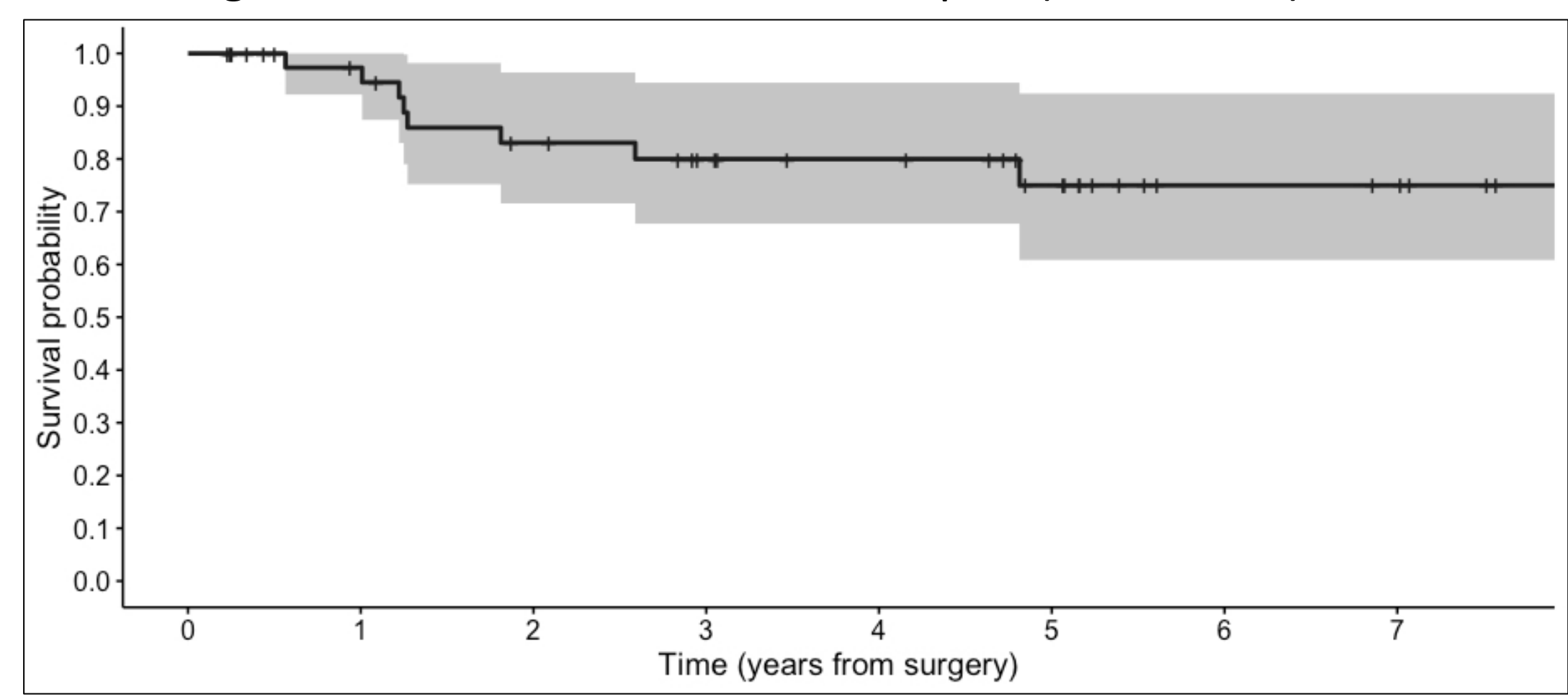


Figure 4. Survival analysis after arthroscopic labral repair in patients with ALPSA lesions

## CONCLUSION

- ALPSA lesions frequently occur in the presence of other intra-articular shoulder lesions and portend a high rate of recurrent shoulder instability despite repair.
- While failure occurs at a high rate, most repair failure for these lesions tends to occur early.