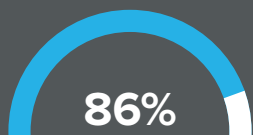


Predictive Healing Score for Decision-Making

Primary Rotator Cuff Repair Augmentation

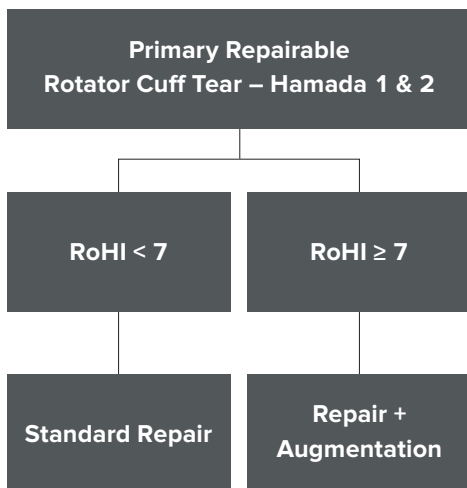


Almost 1 in 5 people failed to heal their rotator cuff after primary repair¹



Rotator cuffs failed at suture-tendon interface²

Primary Rotator Cuff Repair Treatment Algorithm³



Factors influencing the risk of failure in tendon healing after primary rotator cuff repair¹:

- AP tear size
- Grade of infraspinatus fatty infiltration
- Bone mineral density
- Tear retraction
- Increasing age > 70 yr
- Level of work activity

Kwon et al created a 15-point scoring index (RoHI) based on the above patient risk factors to predict healing of the rotator cuff.¹

Rotator Cuff Healing Index (RoHI) Score Ranges¹

	High chance of healing	At risk for failure	High chance of failure	
Score	0-4	5-6	7-9	10-15
Healing Rate	94%	68%	38%	14%

RoHI Case Example

Factors of RoHI	Input	Score
Age	71	2
AP tear size (cm)	3.5	2
Retraction (cm)	2.5	2
Infraspinatus fatty infiltration grade	3	3
Bone mineral density	0	0
Level of work activity	Patient Value	0
	RoHI Score	9
	% Chance of Healing	38%

- Several studies show the use of graft augmentation in rotator cuff repairs may improve biomechanical strength and tendon healing, and increase healing rates.⁴⁻⁷
- Specifically, acellular dermal allograft may have the ability to vascularize and remodel into tendon-like tissue and increases the biomechanical strength of a rotator cuff repair by over 60%.⁶ Additionally, it may improve postoperative healing compared to standard repairs.⁴
- In large rotator cuff tears (>3 cm), postoperative healing rates increased to 85% with dermal augmentation, compared to 40% with a standard repair.⁴

References

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