

Title:

Surgical Treatment of Insertional Achilles Tendinopathy Augmented With Human Acellular Dermal Matrix: A Retrospective Case Series

Authors:

Bryce Corlee DPM, Mitchell Bloomquist DPM, Branden Brantley DPM, Curtis Hamilton DPM, Vytautas Ringus MD

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Study Objective:

The purpose of this case series was to evaluate the efficacy of IAT surgical treatment with the use of ADM* and without the use of suture anchors, following partial detachment of the Achilles tendon.

Background:

Insertional Achilles tendinopathy (IAT) presents as pain and swelling at the insertion of the Achilles tendon. Those most affected are runners and other athletes, as well as patients with the following comorbidities: hypertension, diabetes mellitus, and obesity. These comorbidities have been associated with acute tendon rupture and decreased healing potential.

Surgical management of IAT is used when conservative measures fail to ameliorate symptoms. Approaches vary with multiple different types of incisions. Historically, use of one or more suture anchors have been used to reattach the Achilles tendon. Autografts, allografts, and xenografts are routinely used to provide supplemental support to the repair of the Achilles tendon.

Results:

- 42 patients - followed for a mean of 20.8 months.
- VAS (visual analog scale) score improved from a mean of 5.1 to 1.9 at final follow-up.
- Mean time to weightbearing was 4.4 weeks.

Conclusion:

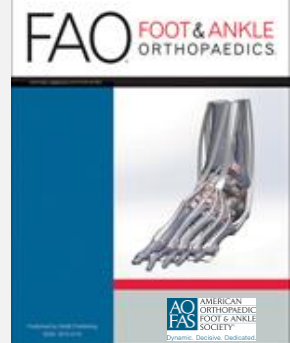
This protocol for surgical treatment of IAT with the use of human ADM* allograft augmentation resulted in improved VAS scores and was associated with a low risk of postoperative infection without a prolonged non-weightbearing period.



Intraoperative view of lateral incision placement and reflection of the lateral Achilles tendon attachment.



Intraoperative view of the interposition of the acellular dermal matrix (ADM) anterior to the Achilles tendon and posterior to the cut surface of the calcaneus.



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What are the short-term outcomes of patients that underwent surgical treatment for insertional Achilles tendinopathy with augmentation of the repair with human acellular dermal matrix allograft and no suture anchors?

Characteristic	ADM group N=42
Age (years)	51.5 ± 2.5
BMI (kg/m ²)	35.6 ± 8.3
Male	10 (23)
Comorbidities	
Hypertension	20 (47.6)
Diabetes Mellitus	4 (9.1)
Tobacco Use	6 (14.3)



Surgical treatment for insertional Achilles tendinopathy with augmentation with acellular dermal matrix allograft but without suture anchors

Time to weightbearing, complications and outcome scores collected

This is a visual representation of the abstract.

42 procedures with acellular dermal matrix allograft

Average time to weightbearing 4.4 weeks

Characteristic	ADM group N=42
VAS	
Preoperative	5.1 ± 2.5
Postoperative	1.9 ± 1.9
Change in VAS score	3.2 ± 2.6
p-value (difference within group)	<0.001
Time to weight bearing (weeks)	4.4 ± 0.8
Follow-up time (months)	20.8 ± 18.8

Characteristic	ADM group N=42
Complications, n (%)	11 (26.2)
Rupture	1 (2.4)
Reoperation	4 (9.5)
Delayed wound healing	3 (7.1)
Infection	0 (0)

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