Early Motion for Achilles Tendon Ruptures: Is Surgery Important?

Reference:

Scientific Literature Review

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Podiatric Relevance:
This study lays out useful data for comparison of two treatment modalities of acute Achilles tendon ruptures which are currently widely debated within the podiatric community.

Method:
This study was a prospective analysis of forty-two patients enrolled from 1997 to 2002. All patients had an acute Achilles tendon rupture of less than 10 days, were between the ages of 18-50, were non-smokers, had a normal uninjured contralateral limb, had no significant medical problems, and were not on any medications that may have impaired tendon healing. Patients were randomized into non-surgical and surgical groups. Both groups had the same post-operative care with early mobilization. Follow-up was measured at 10 days, 8 weeks, 3 months, 6 months, and 12 months from injury. Post-operative comparison data was measured using Musculoskeletal Functional Assessment Index (MDFI) based on a 100-point scale.

Results:
Following eight exclusions from a group of fifty prospectively enrolled patients, 20 patients remained in the operative group and twenty-two in the nonoperative group. Three patients had reruptures after eight weeks; two in the operative group and one in the nonoperative group. All reruptures were from acute traumatic events.

There were no significant differences between groups in plantarflexion and dorsiflexion at 8 weeks, 6 months, or 1 year. All had less range of motion when compared to uninjured side. There were no significant differences in the MFAI scoring based on the same interval follow-up. There were also no significant differences in calf circumference.

Conclusion:
On the basis of these findings, there is no significant difference between operative vs. nonoperative outcomes in patients who received early, controlled motion as part of their rehabilitation. This study supports early motion as an acceptable form of rehabilitation in both surgically and nonsurgically treated acute Achilles tendon ruptures.