

THE JOURNAL OF BONE & JOINT SURGERY

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## **American Academy of Orthopaedic Surgeons Clinical Practice Guideline on Treatment of Achilles Tendon Rupture**

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*J Bone Joint Surg Am.* 2010;92:2466-2468.

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**This information is current as of October 21, 2010**

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### **Publisher Information**

The Journal of Bone and Joint Surgery  
20 Pickering Street, Needham, MA 02492-3157  
[www.jbjs.org](http://www.jbjs.org)



## AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS CLINICAL PRACTICE GUIDELINE ON

# Treatment of Achilles Tendon Rupture

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### Acute Achilles Tendon Rupture Summary of Recommendations

The following is a summary of the recommendations in the AAOS' clinical practice guideline, The Diagnosis and Treatment of Acute Achilles Tendon Rupture. The scope of this guideline is specifically limited to acute Achilles tendon rupture. This summary does not contain rationales that explain how and why these recommendations were developed nor does it contain the evidence supporting these recommendations. All readers of this summary are strongly urged to consult the full guideline and evidence report for this information. We are confident that those who read the full guideline and evidence report will also see that the recommendations were developed using systematic evidence-based processes designed to combat bias, enhance transparency, and promote reproducibility. This summary of recommendations is not intended to stand alone. Treatment decisions should be made in light of all circumstances presented by the patient. Treatments and procedures applicable to the individual patient rely on mutual communication between patient, physician and other healthcare practitioners.

1. In the absence of the reliable evidence, it is the opinion of this work group that a detailed history and **physical exam** be performed. The physical examination should include two or more of the following tests to establish the diagnosis of acute Achilles tendon rupture:
  - Clinical Thompson test (Simmonds squeeze test)
  - Decreased ankle plantar flexion strength

**Disclosure:** The authors did not receive any outside funding or grants in support of their research for or preparation of this work. One or more of the authors, or a member of his or her immediate family, received, in any one year, payments or other benefits in excess of \$10,000 or a commitment or agreement to provide such benefits from a commercial entity (Wright Medical Technology, DeRoyal Industries).

**Disclaimer:** This clinical guideline was developed by an AAOS physician volunteer Work Group and is provided as an educational tool based on an assessment of the current scientific and clinical information and accepted approaches to treatment. It is not intended to be a fixed protocol as some patients may require more or less treatment. Patient care and treatment should always be based on a clinician's independent medical judgment given the individual clinical circumstances.

The complete AAOS guideline can be found at <http://www.aaos.org/Research/guidelines/atrguideline.pdf>

- Presence of a palpable gap (defect, loss of contour)
- Increased passive ankle dorsiflexion with gentle manipulation

Strength of Recommendation – **Consensus\***

2. We are unable to recommend for or against the routine use of magnetic resonance imaging (**MRI**), ultrasound (ultrasonography), and radiograph (roentgenograms, x-rays) to confirm the diagnosis of acute Achilles tendon rupture.

Strength of Recommendation – **Inconclusive**

3. Non-operative treatment is an option for all patients with acute Achilles tendon rupture.

Strength of Recommendation: **Weak**

4. For patients treated non-operatively, we are unable to recommend for or against the use of immediate functional bracing for patients with acute Achilles tendon rupture

Strength of Recommendation: **Inconclusive**

5. Operative treatment is an option in patients with acute Achilles tendon rupture.

Strength of Recommendation: **Weak**

6. In the absence of reliable evidence, it is the opinion of the work group that although operative treatment is an option, it should be approached more **cautiously** in patients with diabetes, neuropathy, immunocompromised states, age above 65, tobacco use, sedentary lifestyle, obesity (BMI >30), peripheral vascular disease or local/systemic dermatologic disorders.

Strength of Recommendation: **Consensus**

7. For patients who will be **treated operatively** for an acute Achilles tendon rupture, we are unable to recommend for or against preoperative immobilization or restricted weight-bearing.

Strength of Recommendation: **Inconclusive**

8. Open, limited open and percutaneous techniques are options for treating patients with acute Achilles tendon rupture.

Strength of Recommendation: **Weak**

9. We cannot recommend for or against the use of allograft, autograft, xenograft, synthetic tissue, or biologic adjuncts in all acute Achilles tendon ruptures that are treated operatively.

Strength of Recommendation: **Inconclusive**

10. We cannot recommend for or against the use of antithrombotic treatment for patients with acute Achilles tendon ruptures.

Strength of Recommendation: **Inconclusive**

11. We suggest early ( $\leq 2$  weeks) postoperative protected weight-bearing for patients with acute Achilles tendon rupture who have been treated operatively

Strength of Recommendation: **Moderate**

12. We suggest the use of a **protective device** that allows mobilization by 2-4 weeks post operatively.

Strength of Recommendation: **Moderate**

13. We are unable to recommend for or against postoperative physiotherapy for patients with acute Achilles tendon rupture

Strength of Recommendation: **Inconclusive**

14. In all patients with acute Achilles tendon rupture, irrespective of treatment type, we are **unable to recommend a specific time** at which patients can return to activities of daily living.

Strength of Recommendation: **Inconclusive**

15. In patients who participate in sports it is an option to return them to sports within 3-6 months after operative treatment for acute Achilles tendon rupture.

Strength of Recommendation: **Weak**

16. In patients with acute Achilles tendon rupture treated nonoperatively, we are unable to recommend a specific time at which patients can return to athletic activity.

Strength of Recommendation: **Inconclusive**

*\*While we strongly encourage reviewers to read the full guideline, please refer to the sections titled “Judging the Quality of Evidence” and “Defining the Strength of the Recommendations Table I” for a detailed description of the link between the evidence supporting the Strength of a Recommendation and the language of the guideline.*