

## **An acute Achilles tendon rupture increases the risk of a contralateral tendon rupture**

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**Introduction.** Rupture of the midsubstance of the Achilles tendon typically occurs in middle-aged people engaged in strenuous athletic activities. If certain risk factors are involved in causing this injury the contralateral side should also be subjected to danger for the same injury. This has not been investigated before and we particularly therefore wanted to examine the rate of contralateral tendon rupture in the patient population.

**Material and method.** From September 1990 to April 1997, 168 consecutive acute Achilles tendon ruptures in 26 women and 142 men were treated operatively. The median age at injury was 38.5 years. In August 1998 all these patients received a questionnaire about cause of injury, risk factors and post injury problems. Median follow-up was 4.2 years. One hundred and fifty four patients replied (92 %).

**Results.** Rupture occurred during sports activity in 74 % of the cases. Pre-injury, 25 % reported local symptoms; at follow-up this had increased to 52 %. The observed complications were as follows; rerupture in 3 patients (2 %), superficial wound infection in 7 patients (4 %) and skin adhesion problems 3 patients (2 %). One patient developed a deep venous thrombosis. Ten patients (6 %) experienced rupture on the contralateral side during the follow-up period, which gives an Odds Ratio of 186 with 95 % CI [96, 362], (p-value < 0.05) compared to the general population risk of this injury.

**Conclusion.** This study suggests that Achilles tendon rupture significantly increases the rupture risk of the contralateral side as well. Secondly many patients treated surgically for Achilles tendon rupture do have postinjury problems at long-term follow-up.