Traumatologie

Walther M, Morrison R, Mayer B: Retromalleolar groove impaction for the treatment of unstable peroneal tendons. Am J Sports Med (2009) 37:1991-194

Abstract

Background: Several techniques are published for the treatment of peroneal tendon instability. Hypothesis: The fibular retromalleolar groove impaction technique is a simple and reliable surgical procedure with low morbidity for the treatment of peroneal tendon instability.

Study Design: Case series

Methods: 23 consecutive patients (average age: 34.2 years, range 16-57 years) with a symptomatic subluxation of the peroneal tendons but no other peroneal tendon injuries were included in the study. All patients were severely limited in sports participation by their symptoms. The mean preoperative American Orthopedic Foot and Ankle Society Score ⁸ (AOFAS-Score) was 68.5 (R: 47-78). The reconstruction of the peroneal retromalleolar groove was performed by removing the cancellous bone behind the groove with a 3.5 mm drill. Then the whole peroneal rim was mobilized with small osteotomes at its edges and impacted into the fibula. Using this technique it was possible to deepen the peroneal retromalleolar groove and to preserve the smooth surface of the peroneal rim at the same time. After the procedure, the patients were kept in a cast boot for 6 weeks with partial weight bearing of 20 kg. The ankle joint was then mobilized under the supervision of a physiotherapist. Linear sports activities were allowed after 7 weeks and unlimited sports after 12 weeks.

Results: No local wound problems were observed, and no further symptomatic subluxation or dislocation of the peroneal tendons was encountered during the 2 year follow up. The mean AOFAS-Score improved to 96.3 (R: 85-100).

Conclusion: Groove impaction offers a simple, quickly done procedure with low morbidity, relatively quick return to sports, and successful elimination of peroneal tendon instability.

Keywords: peroneal tendon, subluxation, instability, fixation, ankle,