

State of the Art in the Treatment of Achilles Tendon Ruptures (ATR)

Early Protected Weightbearing for Acute Ruptures of the Achilles Tendon: Do Commonly Used Orthoses Produce the Required Equinus?

P. Ellison, A. Molloy, L. W. Mason

Aintree University Hospital

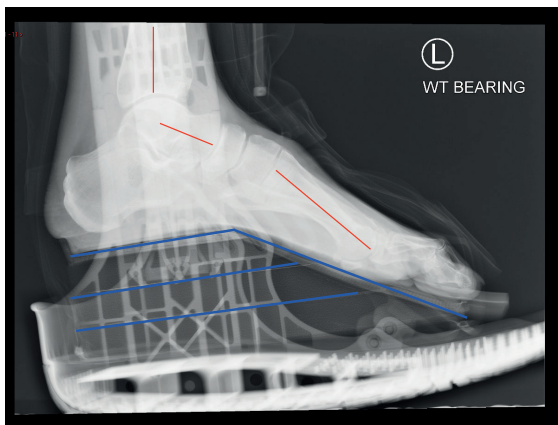
The Journal of Foot & Ankle Surgery 2017, vol. 56, issue 5, pp. 960–963.

DOI: <http://dx.doi.org/10.1053/j.jfas.2017.06.017>.



Background

A comparison of the tibio talar and tibio-1st metatarsal angles in two different walking orthoses by lateral radiograph.



orthosis with wedges



vacuum orthosis (VACOped)

Results

- Caution in the use of wedges (may not produce sufficient ankle equinus to shorten Achilles tendon during healing)
- May result in tendon elongation, and therefore,
 - Reduced plantar flexion power
 - Reduced function and patient outcomes

The treatment of a rupture of the Achilles tendon using a dedicated management programme

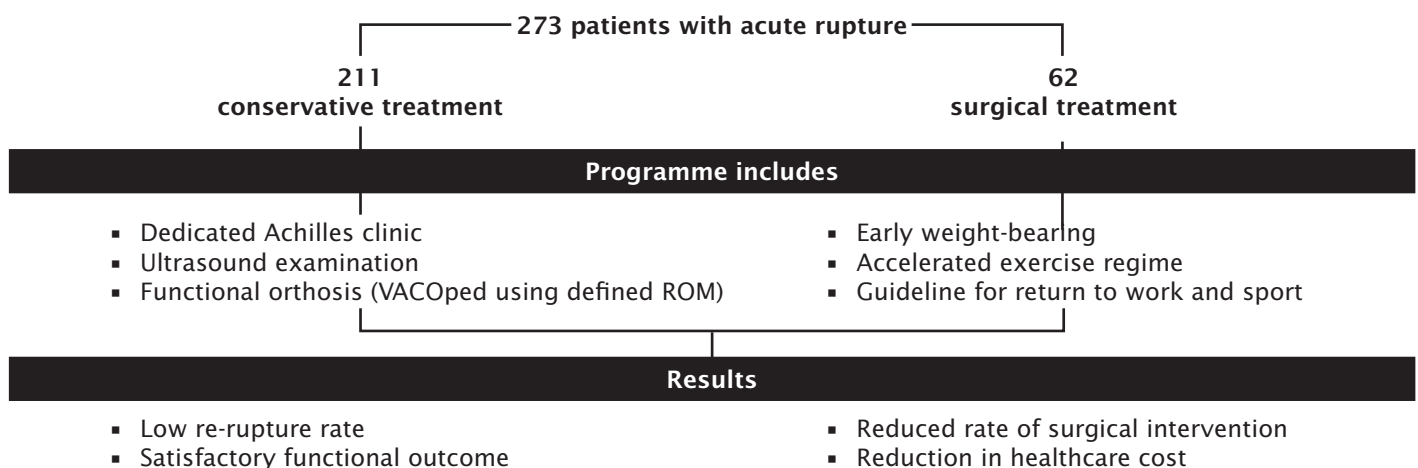
A. M. Hutchison, C. Topliss, D. Beard, R. M. Evans, P. Williams

Morrison Hospital, ABMU University Health, Board, Swansea, United Kingdom

Bone Joint J 2015; 97-B:510–15. DOI: [10.1302/0301-620X.97B4.35314](https://doi.org/10.1302/0301-620X.97B4.35314).



Summary of the SMART (Swansea Morrison Achilles Rupture Treatment) programme Retrospective analysis from 2008-2014



Centres of Excellence

Achilles Tendon Ruptures: A review of new physiotherapy rehabilitation programme at the Royal Devon and Exeter Hospital

S. Dunkerley, A. Goubran, L. Clark, N. Talbot, I. Sharpe

Royal Devon & Exeter Hospital
(not yet published)

Royal Devon and Exeter 
NHS Foundation Trust



Case-series of 242 ATR (144 conservatively; 98 operatively), managed with special physiotherapy rehabilitation programme (Exeter Experience).

Results

Lower complication and re-rupture rate than in published studies.

Functional dynamic bracing and functional rehabilitation for Achilles tendon ruptures: A case series

P. Dolphin, K. Bainbridge, P. Mackenney, J. Dixon

The James Cook University Hospital, South Tees Hospitals NHS Foundation Trust;
Teesside University, Health and Social Care Institute

Physiotherapy Practice and Research 2016, vol. 37, no. 2, pp. 119-125. DOI: 10.3233/PPR-160078.



Case-series of 25 acute ATR, managed with a conservative functional dynamic bracing and functional rehabilitation programme.

Results

Management of ATR using functional dynamic bracing within a functional rehabilitation programme produces good clinical outcome.

Non-surgical treatment of Achilles rupture: Does duration in functional weight bearing orthosis matter?

R. Aujla, A. Kumar, M. Bhatia

Trauma & Orthopaedic Surgery, University Hospitals of Leicester, Leicester, United Kingdom

Foot Ankle Surg 2015, vol. 22, issue 4, pp. 254-258. DOI: <http://dx.doi.org/10.1016/j.fas.2015.11.003>.



Method

88 patients included, use of ATRS-Score and 1-year follow-up.

Investigation of functional outcomes between two dynamic conservative ATR treatment regimens of differing duration (8 or 11 weeks).

Results

Reduction of treatment duration does not lead to a detriment in functional outcomes or complication rate.