

# Clinical Audit Report

A review of outcomes measures following the introduction of the VACOped® adjustable external equinus boot for the management of Achilles tendon ruptures

## Introduction

March 2018, hospital guidelines moved to align with emerging evidence promoting implementing an accelerated, functional rehabilitation regime. Originally using a walker boot with wedges (www), further study data supports a move to promoting better ankle equinus with early weight bearing. The VACOped allows for these parameters to be achieved, so the Trust's treatment guidelines were updated in August 2023 to include the VACOped for treatment of Achilles tendon ruptures. After 24 months after introduction, an audit review of it's effectiveness is required.

## Aims

- To compare the outcome measures obtained from patients treated using the VACOped® adjustable external equinus boot with those treated previously with Airstep® walker boot with wedges.(www)
- To compare the outcome measures obtained from patients treated using the VACOped® adjustable external equinus boot with those published by other foot and ankle centres.

## Methods

- Retrospective analysis of 84 ATR patients (42 treated with VACOped, 42 treated with Airstep® walker with wedges). Both groups matched for numbers, gender and laterality (73 males, 11 females eligible for total audit)
- Patient reported scoring used for data comparison, using Achilles Tendon Rupture Score (ATRS) Achilles Score (AS) and Quality of Life Score (EQ-5D-5L) at 4 and 9 months in Walker with wedges (www) group, 6 and 12 months in VACOped group.
- Data for re-rupture, symptomatic VTE, apparent tendon lengthening recorded for both groups, as well as additional data in the VACOped group at 12 months inc. calf girth, single heel raise height, number of repeated single heel raises to failure.

### Inclusion criteria

- Acute, primary, first episode Achilles tendon rupture
- Conservative or surgical management
- All gender identities aged over 18

### Exclusion criteria

- Chronic ruptures great than 6 weeks
- Open injury and/or a concurrent injury to the same limb
- Unable to read the English language and therefore unable to complete the questionnaires

## VACOped<sup>®</sup> by OPED

The VACOped is a unique orthosis offering both cast stability and dynamization. This allows for an accelerated rehabilitation protocol incorporating mobilisation, safely controlled to desired parameters.



Scan here for clinical study data

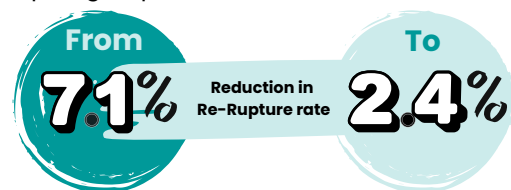


## Results

- Significant increase to ATRS and AS scores at 6 & 12 months in VACOped group compared to WWW group.



- Significant drop in re-rupture rate from WWW group to VACOped group



## Conclusion

This audit substantiates and validates the use of the VACOped® boot as a cost-effective replacement for the Airstep® walker boot with wedges in the management of Achilles tendon ruptures as outlined in the 2022 COCH guidelines with both improved outcomes scores at both 4-6 and 9-12 months and a reduction in the re-rupture rate. The results compare very favourably with those published other foot and ankle centres.