
Sleeping safe and sound after Achilles rupture

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General data

Abstract text

Abstract text: Introduction

Recovery after rupture of the Achilles tendon is slow. Whether repaired surgically or managed non-operatively, patients spend weeks in an orthopaedic boot. Equinus position 24 hours a day is essential, reducing tension to protect the healing tendon from elongation. Poor compliance risks re-rupture or elongation.

A traditional equinus cast prevents ankle dorsiflexion. Boots maintain equinus either with heel wedges or hinges. Boots are more convenient than serial plaster casts, facilitating early weight-bearing and allowing careful removal for skin care.

Taking off the boot, with no other support, risks inadvertent dorsiflexion and may disrupt or stretch the healing tendon.

Boots are invariably heavy, hot and cumbersome. Boots get dirty. Patients dislike sleeping in their boots. Temptation to remove the boot, particularly at night, is strong.

The Thetis Achilles Tendon Night Splint (TARNS) is a new alternative to the boot. It holds the foot in equinus, is lightweight, secure and aids better sleep. The TARNS is not suitable for walking upon. Nocturia is therefore a relative contraindication.

Surgeons are wary of any change that might lead to complications. This study investigated whether use of TARNS affects complication rates.

Materials and Methods

We reviewed two prospectively collected 12-month cohorts of patients. All Achilles ruptures were managed by one Consultant. Ultrasound scans were routinely used to guide management, with shared decision making. The only difference between the two patient groups was the additional option to use a Thetis night splint (TARNS) in the second time period.

Results

There were no demographic differences between groups. There were no differences in: surgical repair rate; adverse events (VTE, re-rupture, revision surgery); or functional score.

Conclusion

The Thetis Achilles rupture night splint is safe for patients to use as an adjunct to functional rehabilitation. Patients and their surgeons can all sleep well.

Is this research or audit?: Audit

General

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