

Leicester Achilles Management Programme (LAMP)

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Introduction/Purpose: Conservative treatment of acute AT ruptures with functional rehabilitation has demonstrated superior results to surgery with equal reported re-rupture rates without the added complications of surgical treatment. The variation in patient selection for functional rehabilitation as well as the duration and type of rehabilitation regime utilised adds to the confusion of this clinically proven method of treatment.

Since 2011, all patients presenting to our department with an acute AT rupture have been treated with a standardised functional rehabilitation regime in a Vacoped boot for 8 weeks with immediate weight bearing (the LAMP regime).

The aim of this paper is to present ATRS scores and objective measures at 12 months follow up of patients treated with the LAMP regime.

Methods: A prospective study of all AT ruptures treated conservatively with the LAMP regime between February 2011 and September 2015 was performed.

The LAMP regime consists of the use of a Vacoped boot locked in 30° plantar flexion for the 1st 4 weeks. The boot is then dynamised allowing movement between 15-30° over the following 2 weeks, and finally completely dynamised allowing movement from 0-30° over the final 2 weeks. After a total of 8 weeks treatment, the boot is removed. During treatment, patients are allowed to remove the boot once a day to enable them to shower without putting any weight on the affected leg.

Patients who had 12 months follow up data of ATRS scores were included. Subsequent evolution of the service has resulted in objective measures including the calf girth, heel raise height and heel raise repetitions being recorded. Complications of treatment were noted.

Results: 442 patients were treated conservatively with the LAMP functional rehabilitation regime. Ultrasound imaging was only performed in 10% of cases where clinical assessment was equivocal. The incidence of a venous thromboembolic event was 5.9% with a re-rupture rate of 2%.

200 patients had 12 months ATRS scores available and 46 patients had ATRS scores as well as objective measures of calf girth, heel raise height and repetitions at 12 months.

The average ATRS score was 75.3 at an average follow up of 25 months post injury. Men had significantly better outcomes compared to women.

There were statistically significant differences in the muscle girth and heel raise height when compared with the uninjured side but these did not correlate with the ATRS score.

Conclusion: This is the largest series of acute AT ruptures treated conservatively with the use of a standardised functional rehabilitation regime demonstrates satisfactory patient reported outcome measures at 12 months follow up. Objective measures demonstrate inferior results when compared to the uninjured side but this does not correlate with the ATRS score