



LARS LIGAMENT REPAIR OF ACUTE TENDO- ACHILLES RUPTURE

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Abstract

The Achilles tendon is the most commonly ruptured tendon in the body and yet its management remains controversial due to potential surgical complications. We believe that primary repair using LARS ligament augmentation, combined with early mobilisation will significantly reduce all these potential problems and lead to improved functional outcomes.

Nine patients with acute Achilles tendon ruptures underwent primary repair using augmentation with a Ligament Augmentation and Reconstruction System (LARS) ligament. Day one postoperatively each patient was started on active range of motion exercises. Clinical parameters, isokinetic strength and outcome measurements (The American Orthopaedic Foot and Ankle Society (AOFAS) ankle and hindfoot score and Lower Extremity Functional Scale (LEFS) was utilised to assess pain and function, Tegner score to evaluate activity) were evaluated at an average follow-up of 17 months. Complications, if any, were also recorded.

There were no re-ruptures and all patients returned to normal work (average time 9.2 weeks) and all but one returned to their previous level of recreational sporting activity (average time 20.8 weeks). The postoperative performance testing showed positive results with the mean decrease in calf circumference of affected leg was 1.0 cm (range, -0.5 to 2.0), and every patient was able to perform at least one heel-raise with the mean heel raise difference being -3.8 repetitions (range, -1 to -10 reps) when compared to the other leg. In terms of functional outcomes, all patients reported very good results. The mean AOFAS score postoperatively was 83.4% (range, 74% to 100%) and the mean LEFS score was 82.5% (range, 45 to 100%). The mean preoperative Tegner score was 4.75 (range, 2 to 8) and the postoperative score was 3.75 (range, 2 to 7).

The results of our preliminary clinical series indicate that LARS ligament repair of acute Achilles tendon ruptures provides a reliable and effective technique for repair. It eliminates the need for graft harvesting, it decreases postoperative complications, but most importantly, patients have improved functional outcomes.

- General

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