GASTROCNEMIUS RECESSION PROVIDES IMPROVED OUTCOMES FOR PATIENTS WITH TIBIALIS ANTERIOR TENDINITIS: A CASE SERIES

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Purpose: This case series analyzes gastrocnemius recession as a treatment for tibialis anterior tendinitis, a rare overuse condition occasionally seen in some athletes and the overweight elderly. Conservative treatment for tibialis anterior (TA) tendinopathy is nonoperative, including NSAIDs, custom orthoses, and night splints. Those who fail are candidates for operative management, such as direct debridement and reinforcement of the distal TA insertion with suture or extensor hallucis longus tendon transfer. For comparison, active patients with TA tendon rupture may undergo primary repair, tendon transfer, and reconstruction. Additionally, gastrocnemius recession is used to restore dorsiflexion and reduce tension on the TA tendon while it heals. Given the success of gastrocnemius recession as treatment for TA tendon rupture, it may also be an effective treatment for recalcitrant TA tendinitis.

Methods: Seven cases (five patients) with TA tendinopathy who underwent ipsilateral gastrocnemius recession were reviewed. Post-operative course included visits two and eight week postoperatively, with a final phone call at 4 to 6 months, during which functional capacity and pain were assessed using the Foot and Ankle Disability Index (FADI) and the AOFAS Ankle-Hindfoot score, along with subjective outcome rating and overall sense of patient satisfaction.

Results: Mean Foot and Ankle Disability Indexes and AOFAS scores were found to be greatly improved as compared to pre-operative scores. At postoperative call, patients reported a mean of less than 1 out of 10 pain with activity, significantly improved from 7.7/10 pain with activity preoperatively (p< 0.001). Patient satisfaction scores demonstrated strong patient support for the procedure, with a majority of patients stating they were “extremely satisfied” with their outcome and would recommend the treatment for others.

Conclusion: TA tendinitis is a rare condition with limited literature guiding treatment. As with other tendinopathies, non-operative management is the mainstay of treatment but may result in prolonged recovery. Compared to other surgical options, gastrocnemius recession offers the advantages of faster recovery, no postoperative immobilization, and no donor site morbidity. While limited in overall sample size, the decrease in pain, increase in functionality, and overall level of patient satisfaction strongly suggests that gastrocnemius recession appears to be an effective surgical treatment for recalcitrant TA tendinitis.