Chronic Achilles Tendon Rupture Case Series

¹MD Terence, ¹AG Nur Sabrina

Department of Orthopaedics, Hospital Universiti Sains Malaysia

Introduction

More than 20% of acute injuries are misdiagnosed, leading to a chronic rupture. We are presenting 2 cases of chronic Achilles tendon rupture.

Report

First case, a 20-year-old-man sustained Achilles tendon rupture with gap 6cm presented 7 weeks after sports injury. Gastrocnemius fascia turn down and flexor hallucis longus augmentation was done. (Figure 1) Second case, a 22-yearold-man sustained open talus with and traumatic tendon Achilles segmental cut which total up to 11cm lost. After patient was cleared out of infection, he underwent Achilles tendon reconstruction with cryopreserved tendon Achilles allograft. (Figure 2) Both patients returned to normal activity within 6 months post op.

Discussion

Chronic tendon Achilles rupture with large gap defects is challenging to treat, even for most foot and ankle surgeon. It results in problems such as tendon retractions with gaps at the cut ends, calcification, scarring, and collagen deterioration. The primary goal reconstruction is to restore strength and function of gastrocnemius-soleus complex by creating the optimal length-tension relationship.² Many surgical techniques have been described for tendon reconstruction such fascia advancement (V-Y plasty) or tendon transfers (FHL, FDL, Peroneus Brevis, soleus turn down flap).² The use of allograft allows bridging of large tendon defects with an adequate graft, avoiding donor site morbidity and relative ease of surgical technique.



Fig 1A: gap measuring 6cm; B, C Gastrocnemius fascia turn down and flexor hallucis longus augmentation was done.



Fig 2 D: gap measuring 11cm. E,F Allograft tendon Achilles reconstruction done

Conclusion

Although many choices of surgical technique available, mostly it depends on factors such as the size of the gap, the quality of the tendon, and the surgeon's comfort and expertise. Proper evaluation and treatment strategy must be planned for successful reconstruction.

Reference

- 1. Maffulli N, et al: Chronic Achilles Tendon Rupture. Open Orthop J. 2017
- 2. Prasad Chaudhari D, et al: Int J Orthop. 2019
- 3. Ofili KP, et al; The Neglected Achilles Tendon Rupture Repaired with Allograft: A Review of 14 Cases. J Foot Ankle Surg. 2016