

A Case Report: Dual-Incision Technique For Insertional Achilles Tendon Rupture Repair With V-Y Advancement

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INTRODUCTION:

Various treatment options for Achilles segmental defect repair were described¹. V-Y advancement usually required a single large incision to mobilise the tendon². We described a case of using a limited dual-incision technique for V-Y advancement to reduce the wound size for insertional Achilles tendon rupture with underlying chronic tendinopathy and Haglund deformity.

REPORT:

This 33 years old gentleman who had chronic intermittent insertional Achilles tendinopathy symptom, ruptured his insertional Achilles tendon during a futsal game. He complained of weak push-off during walking and his Thompson's and Mattle's tests were positive with palpable gap at the Achilles insertion. Ultrasound showed 3 cm gap and thickened and increased echogenicity intra-substance within the Achilles tendon.

Operative treatment started with a para-medial incision at the Achilles tendon insertion. The diseased tendon segment were debrided, as shown in Figure 1 which resulted in 5 cm segmental loss. Haglund deformity was resected (as shown in Figure 2) and flexor hallucis longus (FHL) was transferred into the calcaneum as augmentation. A separate midline incision at the calf was done and the sural nerve was identified as shown in Figure 1, before V-Y advancement was performed. FHL deep fascia and para-Achilles adhesion were released prior to mobilising the advancement. The Achilles tendon insertion was secured with a double row technique.

His foot was rested in gravity-equinus for 3 weeks and weaned to full weight bear in a walker boot in 2 months post-operative. He was weaned off the boot by 4 months. His Achilles

Tendon Rupture Score (ATRS) at 4 months post-operative was 68/100.



Figure 1: Intra-operative pictures showing insertional Achilles gap, the dual-incision wounds and the sural nerve. Far right picture showed healed wounds.



Figure 2: Pre and Post-operative radiographs showed the resected Haglund deformity.

CONCLUSION:

An Achilles tendon repair that required V-Y advancement, can be performed with a limited dual-incision technique instead of a single long incision to reduce the risk of wound-related complications and post-operative pain.

REFERENCES:

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