

Reconstruction of Post-Traumatic Chronic Tendinopathy of Extensor Hallucis Longus (EHL) Tendon with Extensor Digitorum Longus (EDL) Tendon Transfer

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INTRODUCTION

Lacerations to the dorsum of the foot are often associated with EHL injuries. If they are left unrepaired, symptomatic chronic EHL dysfunction would ensue, leading to flexion deformity of the great toe which requires surgical correction.

REPORT:

A 16-year old schoolboy presented to us complaining of inability to extend the left great toe. Three months prior to that, he sustained a deep laceration wound over the dorso-medial aspect of the left foot following a road traffic accident. During the index surgery, it was noted that the EHL was intact. He was lost to follow up at first, only to visit our center later with the chief complaint mentioned.

Clinically he had a toe drop deformity. He was unable to actively extend the great toe. Extension of the other toes was normal with good strength. There was no palpable gap along the EHL tendon.

Dorsal approach along the EHL tendon was utilized to expose the EHL. Upon exploring the EHL, it appeared intact, but there was loss of tendon gliding during manipulation of the great toe. A segment of the tendon (4-cm long) located over the head of MTB was noted to be fibrosed and sclerotic. The diseased tendon segment was excised, leaving a tendon gap of 6 cm.

A separate incision centered over the MTPJ of the second toe was made. After performing tenotomy of EDL tendon, its proximal stump was rerouted and retrieved through the first incision.



Figure 1: Segment of the diseased EHL tendon.



Figure 2: Post EDL-to-EHL tendon transfer

The EDL tendon was then sutured to the EHL tendon stump using weave technique with Prolene 3/0.

Two months after the surgery, he was able to actively extend the left great toe.

CONCLUSION:

EDL-to-EHL tendon transfer is a safe and effective technique to reconstruct EHL when primary end-to-end repair is not possible.

REFERENCES:

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