

# JONES TENDON TRANSFER FOR HALLUX PLANTAR ULCER: EARLY EXPERIENCE OF 3 CASES

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## INTRODUCTION:

Plantar ulceration over the 1<sup>st</sup> metatarsal head is a problem among diabetic foot. Increased pressure under the first metatarsal head is thought to result from an imbalance of the 3 extrinsic muscles to the first ray, extensor hallucis longus (EHL), flexor hallucis longus (FHL) and peroneus longus and intrinsic muscle weakness putting large load of pressure over the 1<sup>st</sup> metatarsal head and causing callosity and ulceration in the long term.

## METHODS:

Patient A is a 60 years old lady had bilateral hallux plantar ulcer for the past 2 years. Multiple debridements done however the ulcers not fully heal. Jones tendon transfer over both feet performed to relieve pressure over the 1<sup>st</sup> metatarsal head.

Patient B is a 70 years old man with diabetes for past 15 years. He had right foot plantar ulcer for past 6 months that started with a callosity and infection. Jones procedure performed with EHL transfer to 1<sup>st</sup> metatarsal with anchor suture and fusion of hallux distal interphalangeal joint.

## RESULTS:

The procedure able to eliminate the claw hallux deformity effectively and at the same time relieve the pressure over the 1<sup>st</sup> metatarsal head. 6 weeks into the procedure, the plantar ulcer improved tremendously and completely disappear after 2 months.

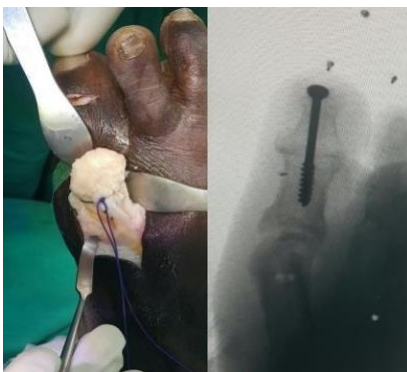


Figure 1. Left : EHL transfer to 1<sup>st</sup> metatarsal  
Right : DIPJ fusion



Figure 2 and 3, 6 weeks and 2 months post-op

## DISCUSSIONS:

Robert Jones described the procedure of transfer the extensor hallucis longus (EHL) tendon from its insertion at the base of the distal phalanx of the hallux to the neck of the first metatarsal in cases of claw hallux with ulcer to allow more dorsiflexion of 1<sup>st</sup> metatarsal and relieve the pressure over 1<sup>st</sup> metatarsal head during walking

## CONCLUSION:

Jones tendon transfer is an relative easy and effective procedure to treat hallux claw toe with or without plantar ulcer. It improves gait and reduce risk of amputation

## REFERENCES:

1.Olson SL, Ledoux WR, Ching RP, Sangeorzan BJ. Muscular imbalances resulting in a clawed hallux. *Foot Ankle Int* 2003;24:477-85.