

Weil Osteotomy For Chronic Metatarsophalangeal Joint Dislocation

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INTRODUCTION:

Metatarsalgia is a condition characterized by pain in the metatarsal region of the foot, often resulting from dislocation or subluxation of the metatarsophalangeal (MTP) joints. The Weil osteotomy shortens the affected metatarsal without significantly raising or lowering the metatarsal head.

REPORT:

A case of a 31-year-old man who experienced chronic dislocation of the 4th and 5th MTP joints in his right foot. Eight months prior, he was involved in a motor vehicle accident that resulted in a moderate head injury, however the dislocation was not diagnosed at that time. After recovering, he began to walk again and reported pain in his right forefoot.

Upon clinical examination, it was observed that the 4th and 5th toes were shorter, and the usual curvature of the metatarsals was lost. The toes were bent downward at the interphalangeal joints and dislocated at the MTP joints, leading to the development of plantar keratosis.

The patient underwent surgery where tendons lengthening were made using a z-fashion technique to release the contracture. A capsulotomy was performed to expose the metatarsal head, soft tissue was released on the plantar side and k-wires were inserted to stabilize the joint after the osteotomy.



Figure 1: Perioperative clinical picture

Figure 2: Post operative xray

CONCLUSION:

The Weil osteotomy in dislocated MTP joint serves as proximal sliding of metatarsal head that assist reduction of joint dislocation and provide axial decompression.

Studies have reported pain reduction rates of up to 80-90% following the procedure¹. Some reported good clinical outcomes with significant pain reduction over a 7-year follow-up, up to 76% of patients rating as excellent².

REFERENCES:

1. Javier PH et al The Weil osteotomy: A comprehensive review, Revista Española de Podología, Volume 28, Issue 2, 2017, Pages e38-e51, ISSN 0210-1238.
2. Hofstaetter, S.G., Hofstaetter, J.G., Petroutsas, J.A., Gruber, F., Ritschl, P., Trnka, H.-J.: The Weil osteotomy: a seven-year follow-up. J Bone Joint Surg Br. 87, 1507–11 (2005).