

Osteotomy guide is affixed to the first metatarsal head



Sagittal saw creates a chevron osteotomy



**Completed chevron osteotomy** 



## O'Brien Osteotomy Guide

Designed for chevron bunionectomies

The guide clamps directly onto bone while helping to retract the EHL tendon. Guide slots fit most saw blades (up to 0.4mm), creating traditional chevron (60°), and long dorsal or plantar arm (50°) osteotomies. K-wire fixation is not required, although a guide pin may be inserted at apex. Guide available in right or left.



Following resection of the medial eminence and a lateral release, the clamp is applied with it's slotted side (guide plate) immediately adjacent to the first metatarsal head. The lateral jaw of the clamp is placed adjacent to the lateral side of the first metatarsal head while retracting the extensor hallucis longus tendon. The apex of the slots on the guide plate should be over a point one centimeter proximal to the articular surface. A K-wire may be inserted at the desired apex of the osteotomy prior to attachment of the clamp according to the surgeon's preference. The clamp in that case would be guided into position by the K-wire inserted into the apex point on the guide plate.

After the clamp is in place and tightened via the ratchet mechanism in the handle, a malleable retractor is inserted plantar to the first metatarsal head. The surgeon may then use a sagittal saw with a standard saw blade commonly used for bunionectomies. The blade should not exceed 0.4mm in width due to potential impingement within the slots. The blade should be long enough to allow a through and through osteotomy to be performed in the metatarsal head.

The surgeon will then choose which type of chevron osteotomy to perform. The guide plate presents four slots, two outer slots forming a 60° angle and two inner slots 10° less than the outer slots. The inner slots allow the surgeon to create 50° osteotomies which facilitate easier screw fixation. The surgeon now has three options: 1. He may choose to perform a traditional chevron osteotomy by using the 60° slots (first and fourth slots), 2. An osteotomy with a "long dorsal arm" by selecting the second slot (marked 10°) and the fourth slot, or 3. An osteotomy with a "long plantar arm" by selecting the first

Following completion of the osteotomy, the clamp is removed, the metatarsal head transposed laterally and fixation achieved according to the surgeon's preference.





