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## Rotational biplanar Chevron osteotomy: technique description

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## **ABSTRACT**

**Introduction:** The Chevron osteotomy is a reliable and popular osteotomy for treating hallux valgus worldwide. Many modifications have been described, but none of them address the rotational deformity of the first metatarsal. The objective of this study is to describe a variation of biplanar Chevron osteotomy that can address first metatarsal rotation when necessary.

**Methods:** The indications for the Rotational Biplanar Chevron Osteotomy (RBCO) are mild to moderate hallux valgus deformity associated with hallux pronation related to internal rotation of the first metatarsal bone. We describe a technique that uses a medial-based wedge parallel to the plantar limb of the osteotomy to free the distal fragment for correct rotation.

**Results:** The more recent concern about hallux valgus surgery represents a very interesting concept that this deformity truly occurs in three different planes, and we may have mistreated the rotation component using current techniques. Many authors have revisited numerous common techniques to adapt them to correct metatarsal pronation. To the best of our knowledge, this is the first paper to describe a modification of the Chevron osteotomy to address rotation of the first metatarsal.

**Conclusion:** We can conclude that rotational biplanar Chevron osteotomy is an useful tool in the treatment of mild hallux valgus associated with metatarsal pronation.

**Keywords:** Hallux valgus; Osteotomy; Foot deformities.

