

LITERATURE REVIEW

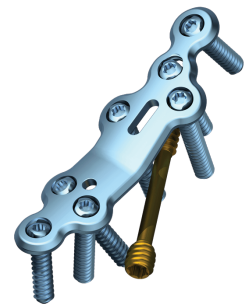
Hallux valgus and hallux rigidus treated with metatarsophalangeal joint arthrodesis

CLINICAL ISSUE:

- Hallux valgus and hallux rigidus are painful deformities and degenerations of the first ray that can cause pain, difficulty with shoe wear and feelings of self-consciousness.
- Revision surgery due to malunion or malposition can delay a patient’s return to activity or prevent the desired reduction in pain.

MEDARTIS SOLUTION:

- Primary MTP Fusion plate pre-contoured in three different dorsiflexion angles to accommodate variations in patient anatomies
- Low anatomical plate profile with minimal screw head protrusion, rounded edges, and a smooth surface for soft tissue protection
- Additional proximal plate hole for increased primary stability in poor bone quality
- Crossing lag screw can be placed for additional stability if needed
- TriLock PLUS offers compression and singular stable locking in one step
- Cannulated MTP Reamers offered in five pairs to fit any MTP-1 Joint
 - Sharp cutting edges for precise bone shape
 - Ring on cone reamer ensures even removal of metatarsal osteophytes



MTP-1 Fusion Plate 2.8

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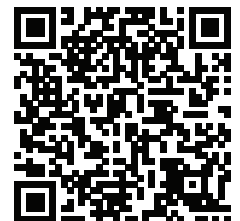
The study by Drittenbass et al. reviewed the cause for revision in 120 consecutive cases with hallux valgus or hallux rigidus that were treated with MTP arthrodesis by cup and cone reamers, a dorsal pre-contoured plate, and a plantar metatarsophalangeal screw.

1. Nonunion was observed in 4 patients (3.3%)
2. Malposition was the greatest cause for revision surgery, 11 patients (9%). Excessive valgus was found in five patients, insufficient dorsiflexion in four patients, and a rotational osteotomy was required in two patients.
3. Two patients were revised with a medial sesamoidectomy
4. Hardware was removed in 12 cases (10%) due to skin irritation
5. No hardware failures, wound healing problems, or infections were observed

KEY TAKEAWAY:

The authors conclude, “The revision rate for nonunion after MTP-1 fusion with the latest locking plate technology is low.” The authors recommend 0°-10° postoperative valgus and careful selection of dorsiflexion to reduce the occurrence of excessive valgus and insufficient extension.

Scan the QR Code to read this study and learn more about the specific methods and results from this study.



REFERENCES:

Drittenbass L, Kutaish H, Chin L, Stern R, Assal M. Why and How Often Is Revision Surgery Necessary after First Metatarsophalangeal Joint Arthrodeses? A Cohort of 120 Consecutive Cases. Open Journal of Orthopedics. 2021, 11:221-232. | DOI: 10.4236/ojo.2021.118021.