

TRANSVERSE PLANE DISLOCATIONS OF THE LESSER METATARSOPHALANGEAL JOINTS

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Forefoot surgery has been significantly refined over the past twenty years due to the efforts of podiatric research and publishing. However, some deformities continue to perplex, confound, and even elude the attempts of many foot surgeons to find a satisfactory means of repair. The transverse plane deformity of the lesser metatarsophalangeal joint is one such deformity.

Correction of the transverse plane deformity has usually been similar to the approach for sagittal plane deformities of the lesser metatarsophalangeal joints. Since sagittal plane malalignment is often part of the complex deformity, partial correction of the deformity may result with this approach. However, since the transverse plane component is not addressed it often remains a residual deformity.

Several approaches to the transverse plane deformity have been attempted. These include capsulorrhaphy, capsulotomy, capsular manipulation, transverse plane osteotomy of the

metatarsal, and partial or total metatarsal head resection.

Recognition of the plantar derangement about the lesser metatarsophalangeal joint has led to the investigation of the plantar approach to the transverse plane deformity of this condition.

In almost all cases of surgical intervention into transverse plane deformities of the lesser metatarsophalangeal joint, fixation is applied. Prolonged fixation greater than six weeks across the metatarsophalangeal joint may decrease the chance of recurrence, however, severe loss of joint motion is often a significant complication.

The successful procedure should result in pain-free range of motion with significant limitation. Maintenance of the digit in alignment with the metatarsal and lack of significant weight transference to adjacent metatarsal heads are also important components of a satisfactory result.