LESSER MTPJ INSTABILITY - SURGICAL OPTIONS

REFERENCES

Prepared by:
Richard T. Bouché, DPM
Seattle, WA

FDL TENDON TRANSFER

FDL TENDON TRANSFER +/- HT REPAIR +/- OSTEOTOMY OR STAINSBY PROCEDURE

PLANTAR PLATE REPAIR (Plantar)

PLANTAR PLATE REPAIR (Plantar) + HT REPAIR + FDL TENDON TRANSFER +/- OSTEOTOMY
PLANTAR PLATE REPAIR (Dorsal) + OSTEOTOMY

PLANTAR PLATE REPAIR (Dorsal) WITHOUT OSTEOTOMY
-Jastifer JR, Coughlin MJ: Exposure via sequential release of the metatarsophalangeal joint for plant plate repair through a dorsal approach without an intraarticular ostetotomy. Foot Ankle Int 35(9):876-885, 2014

FDL TENDON TRANSFER + OSTEOTOMY
-Note: Refer to Nery, Coughlin, Baumfield et al. articles above for description of these 2 procedures for end-stage dislocated toes at MTPJ level. The authors recommend these procedures because of “extensive plantar plate damage”
LESSER MTPJ FUSION +/- 1ST MTPJ FUSION

STAINSBY PROCEDURE

AMPUTATION
RECOMMENDED SURGICAL PROCEDURES
FOR LESSER MTPJ INSTABILITY
(BASED ON BOUCHÉ/HEIT CLASSIFICATION)

Stage 0 (No instability but extensus deformity that does not reduce w/ dorsal capsulotomy & EDL tendon lengthening): FDL Transfer +/- HT Repair

Stage 1A (<50% Subluxation): PPR +/- HT Repair +/- Osteotomy

Stage 1B (>50% Subluxation): PPR + HT Repair +/- FDL Transfer +/- Osteotomy

Stage 2 (Dislocatable): PPR + HT Repair +/- FDL Transfer +/- Osteotomy

Stage 3 (Dislocated): JOINT PRESERVATION (PPR + HT Repair + FDL Transfer +/- Osteotomy) vs. JOINT ELIMINATION (Arthroplasty, Arthrodesis, Amputation)

Updated Jan 2016
Clinical staging of Lesser Metatarsophalangeal Joint Instability is based on which of following:

a. Lopresti test  
b. Jendrassik maneuver  
c. horizontal drawer test  
d. Lachman maneuver*  
e. none of the above

The presence of which of following clinical findings related to LMTPJI would mean a less favorable prognosis for a successful surgical outcome:

a. multiple planes of toe deformity  
b. arthritic MTPJ  
c. previous failed surgery to fix LMTJI  
d. fixed or irreducible deformity  
e. all of the above*

Which of the following procedures would be the most critical procedure to perform in an athlete with a subacute dislocatable sagittal plane instability of the 2nd toe?

a. shortening 2nd metarsal osteotomy  
b. EDL tendon lengthening  
c. hammertoe correction  
d. FDL tendon transfer  
e. plantar plate repair*