

Case Presentation: Chronic Plantar Foot Ulcer

Joseph L Fiorito DPM

University of Washington

Dept. of Orthopaedics and Sports Medicine

DISCLOSURE

Joseph Fiorito

- No relevant financial relationship reported

Chronic Diabetic Foot Ulcer

- Neuropathic Diabetic Male
 - No history of Peripheral Vascular Disease
- New Ulcer Sub 1st met head
 - Caused by ill fitted cast
 - Duration 1 year
- Treatment:
 - Not taking abx
 - Dry dressing
 - Offloading removable boot (does not use)
 - MRI last visit (concern for osteomyelitis)
- Initial Presentation to my clinic
 - Second opinion regarding surgery and the need for a TMA

Physical Exam

Dermatological



Plantar L Foot Ulcer

- Full thickness ulcer sub 1st metatarsal head
 - 2 x 1.6cm
 - Depth 1cm – to bone
- No signs of skin infection

Physical Exam

Plantar Flexed Met Head



**Gastroc Equinus
Dorsiflexion Contracture of MPJ**

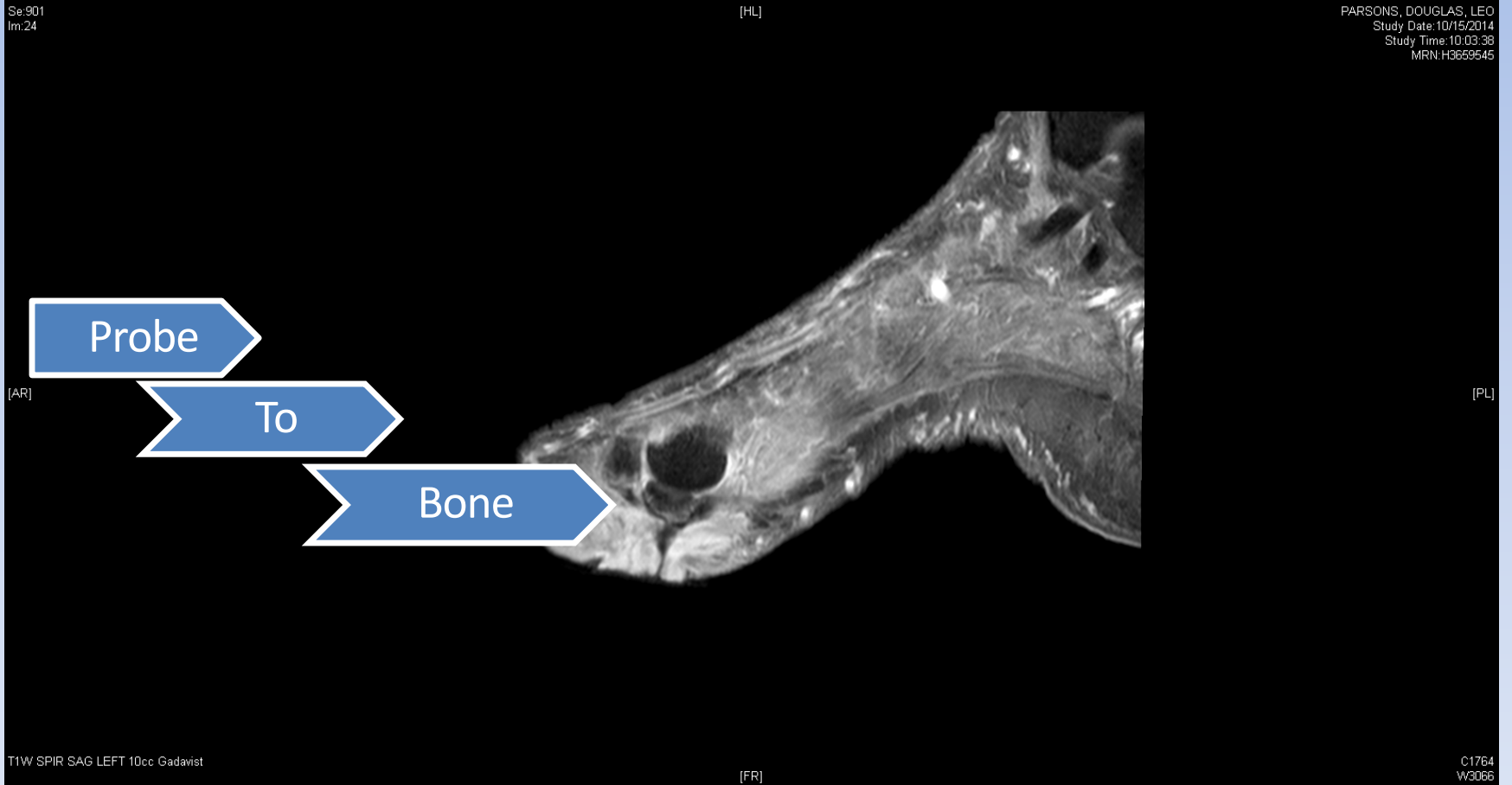


MRI

Se:901
Im:24

[HL]

PARSONS, DOUGLAS, LEO
Study Date: 10/15/2014
Study Time: 10:03:38
MRN: H3659545



[AR]

[PL]

T1W SPIR SAG LEFT 10cc Gadavist

[FR]

C1764
W3066

What Can We Do?

- Treatment Options??
- Surgical vs Non Surgical
 - Does The Patient Need a TMA?
 - Does The Patient Need Antibiotics?
- Plan:
 - Combined Conservative and Surgical
 - Total Contact Cast x 2 weeks
 - Prior to surgery

Total Contact Cast

Initial Exam



**1 week later- 50% reduction
in size**



Surgical Plan

- Osteomyelitis
 - Remove the tibial sesamoid bone
 - Also is an offloading technique
- Deformity
 - Equinus
 - Gastroc Recession
 - Plantar Flexed 1st Ray
 - Tenotomy of the Peroneal longus tendon
 - Extensor Tendon lengthening.

Gastrocnemius Equinus

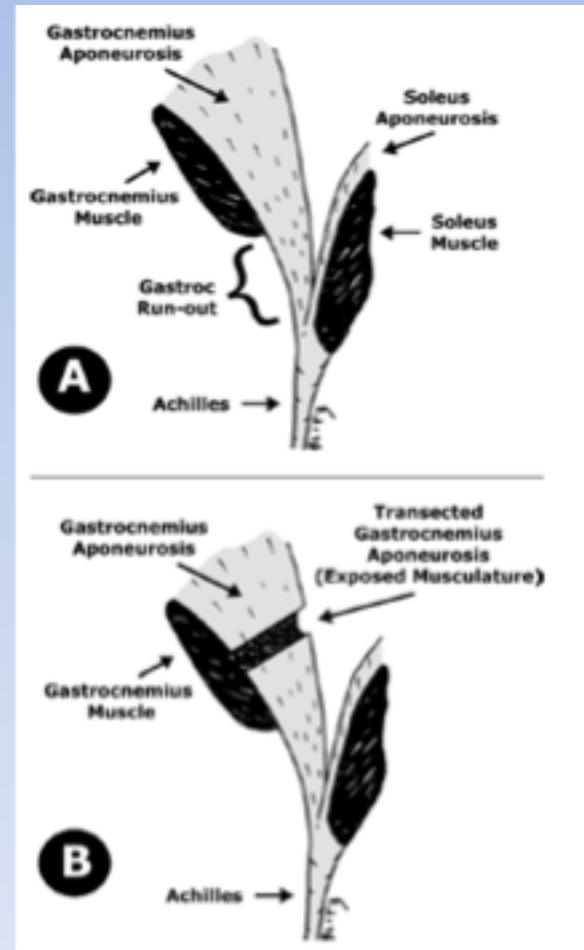
Incision Placement



Gastroc Recession

- Cut the gastrocnemius aponeurosis to allow for the foot to dorsiflex
 - Limit Forefoot Pressure.

Gastroc Recession



Gastrocnemius Recession

**Foot Plantar flexed with Knee
Extended**



**Foot Dorsiflexed with the
knee Extended**



Osteomyelitis

Excision of Tibial Sesamoid



- Remove infected bone as well as reduce plantar pressure underlying the ulceration.

Release of MPJ Contracture

Extensor Tendon Lengthening

- To reduce the dorsiflexion of the hallux which is causing retrograde pressure to the metatarsal.



Final Shot



Post-Op Protocol

- Weight bearing as tolerated in a diabetic offloading boot
 - Until suture removal
- TCC weekly until healed
 - Transition into molded inserts and shoes

One Week Post-OP

No plantar flexion of the metatarsal head



Digit not dorsally contracted



Post Op

2 weeks



2 years



Thank You

