Synovitis

Ensure extremity of interest is as isocenter as possible

SHIM all Fat sat scans!

Make Sure to have patient’s foot positioned in Dorsiflexion

NON SPECIFIC FOOT PAIN

Request: MRT Foot w/o or MRI Ankle w/o
Center at cuboid. Cover maximum foot & ankle using the prescribed FOV.

1. 3 Plane loc
2. Mortise Sag T1 3/1.5 16 FOV
3. Mortise Sag T2 85% dark fat 3/1.5 16 FOV

►Use Sagittal T1 to Grs AXIAL scans
4. Straight Ax PD 3/0.5 16 FOV
5. Straight Ax T2 classic fat sat 3/0.5 16 FOV
6. Oblique Cor T2 classic fat sat 3/0.5 16 FOV

►Use Sag and Axial images to Grs CORONAL scans
7. Mortise Cor PD classic fat sat 3/0.5 16 FOV

1. 3 Plane loc
2. Mortise Sag T1 3/0.5 14 FOV
3. Mortise Sag T2 85% dark fat 3/0.5 14 FOV

►Use Sagittal T1 to Grs AXIAL scans
4. Straight Ax PD 3/0.5 14 FOV
5. Straight Ax T2 classic fat sat 3/0.5 14 FOV

►Use Sag and AXIAL images to Grs CORONAL scans
6. Mortise Cor T1 3/0.5 16 FOV
7. Mortise Cor T2 classic fat sat 3/1.5 16 FOV
8. Mortise Cor PD (2/5 or 2/2 10 FOV) High res for cartilage

►keep TR # 3000 (give or take 100)
►cover joint only (about 20 slices)

OCD - LOOSE BODY - LIGAMENT TEAR

Request: MRT Ankle w/o
MARKER at site of maximum pain

1. 3 Plane loc
2. Mortise Sag T1 3/0.5 14 FOV
3. Mortise Sag T2 85% dark fat 3/0.5 14 FOV

►Use Sagittal T1 to Grs AXIAL scans
4. Straight Ax PD 3/0.5 14 FOV
5. Straight Ax T2 classic fat sat 3/0.5 14 FOV

►Use Sag and AXIAL images to Grs CORONAL scans
6. Mortise Cor T1 3/0.5 16 FOV
7. Mortise Cor T2 classic fat sat 3/1.5 16 FOV

8. Mortise Cor PD (2/5 or 2/2 10 FOV) High res for cartilage

►keep TR # 3000 (give or take 100)
►cover joint only (about 20 slices)

Plantar Fascitis - Fibroma - Heel Pain

Request: MRT Foot w/o
MARKER at site of maximum pain
COVER: Hindfoot, ankle, calcaneus, cuboid, soft tissue

1. 3 Plane loc
2. Mortise Sag T1 3/0.5 14 FOV
3. Mortise Sag T2 85% dark fat 3/0.5 14 FOV

►Use Sagittal T1 to Grs AXIAL scans
4. Straight Ax PD 3/0.5 14 FOV

►Use Sag and AXIAL images to Grs CORONAL scans
6. Mortise Cor T1 3/0.5 16 FOV
7. Mortise Cor T2 classic fat sat 3/1.5 16 FOV

►Use Sagittal T2 FLEX (IDEAL if flex not available) 3/0.5 14 FOV

►Opt: Rad to specify coverage: THIN SA T1 2/0.2, Thin Sag PD FS 2/2, or Thin LA PD FS 2/2

FOOT & ANKLE 6-5-20

FOOT & ANKLE

STRESS FX - MIDFOOT

Request: MRT Foot w/o
MARKER at site of maximum pain
Ant ankle joint through proximal metatarsals

1. 3 Plane loc
2. Mortise Sag T1 4/1 16 FOV
3. Mortise Sag FSTIR 4/1 16 FOV

►Use Sagittal T1 to Grs SHORT AXIS
4. Straight Ax T1 3/1 16 FOV
5. Mortise Cor T2 3/0.5 14 FOV

►Use Short Axis to Grs LONG AXIS
6. Long Ax T1 3/0.2 16 FOV
7. Long Ax T2 FLEX (IDEAL if flex not available) 3/0.2 16 FOV

►Opt: Rad to specify coverage: THIN SA T1 2/0.2, Thin Sag PD FS 2/2, or Thin LA PD FS 2/2

STRESS FX - METATARSALS

Request: MRT Foot w/o
MARKER at site of maximum pain
COVER: Bases of proximal phalanges to the talonavicular joint.

1. 3 Plane loc
2. Straight Sag T1 4/1 16 FOV
3. Straight Sag FSTIR 4/1 16 FOV

►Use Sagittal T1 to Grs SHORT AXIS
4. Short Ax T1 3/1.5 16 FOV

►Use Short Axis to Grs LONG AXIS
5. Short Ax T2 FLEX (IDEAL if flex not available) 3/1.5 16 FOV

►Use Sag and AXIAL images to Grs CORONAL, TOE AXIS
6. Short Ax T2 3/0.5 16 FOV
7. Short Ax T3 3/0.5 16 FOV

 ► Opt: Rad to specify coverage: THIN SA T1 2/0.2, Thin Sag PD FS 2/2, or Thin LA PD FS 2/2

HINDFOOT: HEEL ULCER or MALLEOLAR ULCER Osteo-Tumor-Abscess-Mass

If ER or IP, ensure there has been an exam done within the last 6 months. If not, request that one be ordered. OK to proceed with MRI if exams are ordered and not completed

Request: MRT Foot w/o & MRI Ankle w/o
MARKER over ulcer
(If not necessary to remove dressing) remove dressing

If lesion is metatarsals through toes

Request: MRT Foot w/o & MRI Ankle w/o
MARKER over ulcer
Contrast/Multihance

Covers entire ulcer

1. 3 Plane loc
2. Mortise Sag T1 3/1.5 16 FOV
3. Mortise Sag FSTIR 3/1.5 16 FOV
4. Straight Ax T1 3/1.5 14 FOV
5. Straight Ax T2 classic fat sat 3/1.5 14 FOV
6. Straight Cor T1 3/1.5 14 FOV
7. Straight Cor T2 classic fat sat 3/1.5 14 FOV

FOR TUMOR—PRE AX T1 FAT (1 mmol/kg if grainy)
8. +C Mortise Sag T1 classic fat sat 3/1.5 16 FOV
9. +C Straight Ax T1 classic fat sat 3/1.5 14 FOV
10. +C Straight Cor T1 classic fat sat 3/1.5 14 FOV

FOOT & ANKLE

QUICK HIGH ANKLE SPRAIN

Request: MRT Foot w/o
MRT Ankle w/o
Coil: Foot/Ankle coil
MARKER at site of maximum pain

1. 3 Plane loc
2. Straight Sag SSFSE 4/0 24 FOV
3. Straight Ax T2 classic fat sat 3/0.5 16 FOV

►30 slices with the most inferior slice at the distal tip of fibula

HINDFOOT: TOE ULCER Osteo-Tumor-Abscess-Mass

If ER or IP, ensure there has been an exam done within the last 6 months. If not, request that one be ordered. OK to proceed with MRI if exams are ordered and not completed

Request: MRT Foot w/o & MRI Ankle w/o
MARKER at site of maximum pain
(If not necessary to remove dressing) remove dressing

If lesion is metatarsals through toes

Request: MRT Foot w/o & MRI Ankle w/o
MARKER over ulcer
Contrast/Multihance

Covers entire ulcer

1. 3 Plane loc
2. Straight Sag T1 3/1.5 16 FOV
3. Straight Sag FSTIR 3/1.5 16 FOV
4. Short Ax T1 3/1.5 14 FOV
5. Short Ax T2 FLEX (IDEAL if flex not available) 3/1.5 16 FOV

►Use SHORT AXIS to Grs LONG AXIS (near area of pain)
6. Long Ax T1 3/0.5 16 FOV
7. Long Ax T2 FLEX (IDEAL if flex not available) 3/1.5 16 FOV

FOR TUMOR—PRE AX T1 FAT (1 mmol/kg if grainy)
8. +C Straight Sag T1 classic fat sat 3/1.5 16 FOV
9. +C Straight Ax T1 classic fat sat 3/1.5 14 FOV
10. +C Long Ax T1 FLEX (IDEAL if flex not available) 3/1.5 16 FOV

FOOT & ANKLE

FOOT & ANKLE

FOREFOOT

Request: MRT Foot w/o
MARKER at site of maximum pain
COVER: Entire phalanges and most of metatarsals

1. 3 Plane loc
2. Straight Sag T1 4/1 16 FOV
3. Straight Sag FSTIR 4/1 16 FOV

►Use Sagittal T1 to Grs SHORT AXIS
4. Short Ax T1 3/1.5 16 FOV

►Use Short Ax to Grs LONG AXIS
5. Short Ax T2 FLEX (IDEAL if flex not available) 3/0.2 16 FOV

Abscess

Rad to choose specific optimal sequence and will specify coverage:
Motion’s Neuronmas: THIN SA T1 2/0.2
Plantar Plate or Sesamoids: Thin Sag PD FS 2/2 or Thin LA PD FS 2/2

FOOT & ANKLE

FOOT & ANKLE
Forefoot LA:

Mortise Sagittal

Angle parallel to the talus bone (will also end up being the Cover skin to skin

Mortise Coronal:

Angle Perpendicular to the talus bone (Will also end up being perpendicular to the calcaneus)

Cover entire calcaneus to metatarsals

OBQ Axial:

Angle parallel to the sustentaculum tali (between the talus and calcaneus bones)
Cover a 5 slices above the ankle joint through the entire calcaneus

Straight Axial:

Cover 5 slices above ankle joint through the entire calcaneus.
Straight Coronal

Cover posterior to calcaneus to the metatarsal bones

OBQ Coronal:
Angle perpendicular to the sustentaculum tali (between the talus and calcaneus bones)
Tendon Protocol: Cover posterior to calcaneus to the metatarsal bones
Metatarsal Stress Fx: Ant ankle joint through proximal metatarsals

Short Axis:
Prescribe off of Sagittal Scan. Try to angle perpendicular to metatarsals.

Long Axis:
Prescribe off of Short Axis Scan. Try to angle so the metatarsals are in one plane.