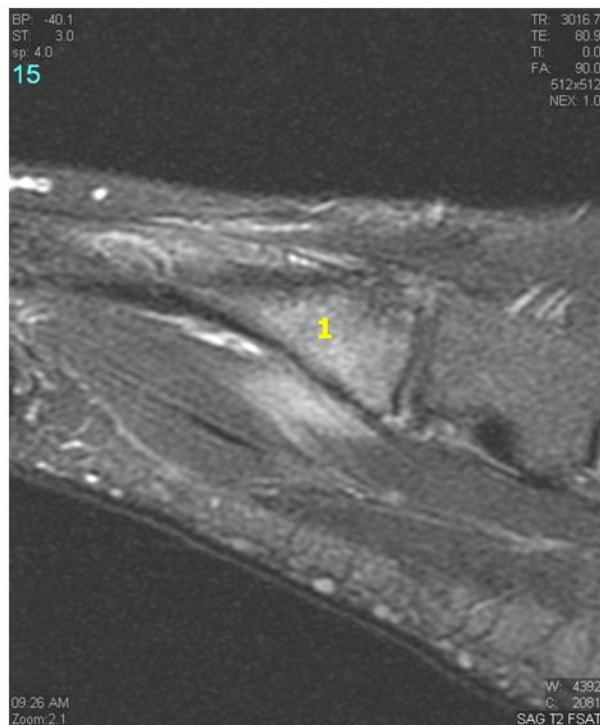


MRI of the Foot: Stress Reaction

History: 56-year-old with foot pain. Recent prolonged wearing of new shoes. Normal x-rays.

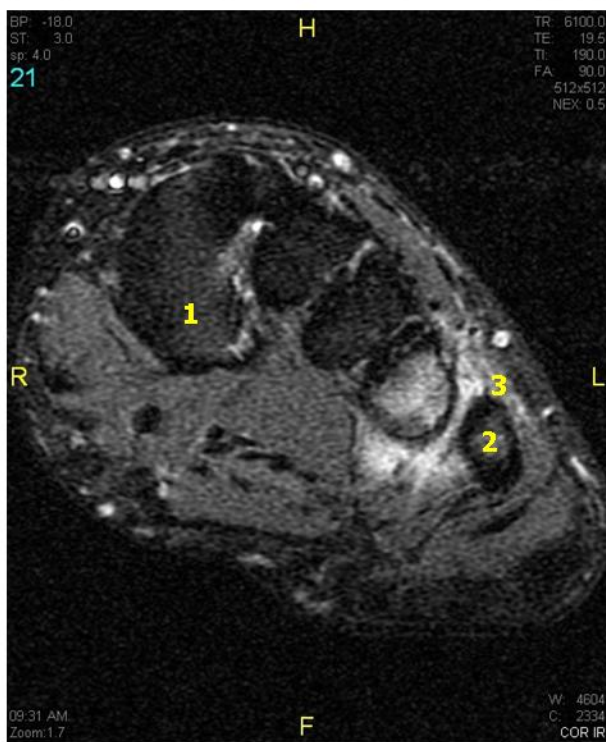
A:



A: Sagittal

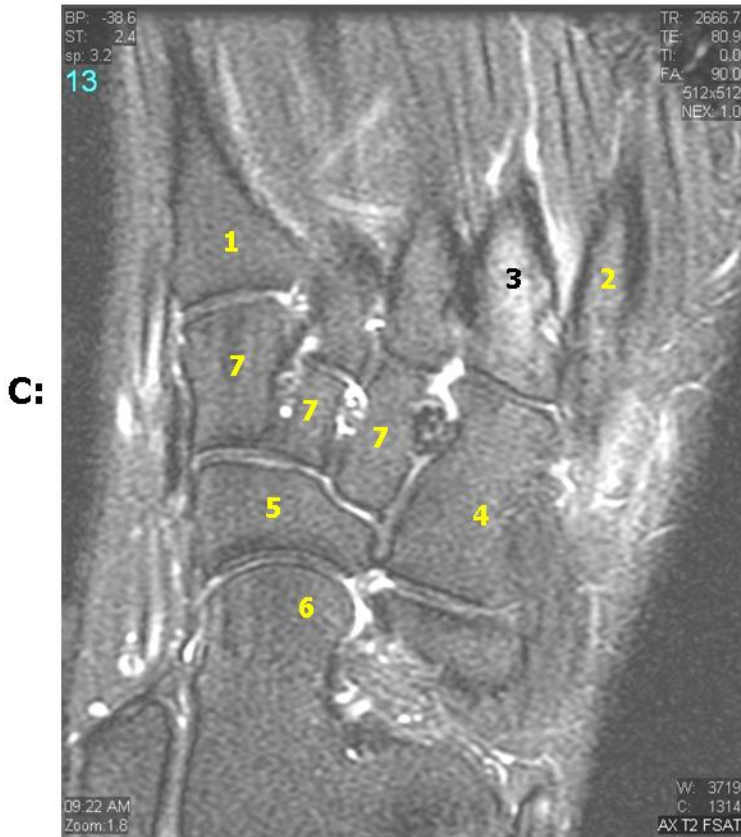
1. 4th metatarsal (MT) bone with edema and with soft tissue edema

B:



B: Axial

1. 1st MT
2. 5th MT
3. 4th MT edema and periosteal reaction



C: Coronal

1. 1st MT
2. 5th MT
3. 4th MT edema & adjacent periosteal reaction
4. Cuboid bone
5. Navicular bone
6. Talus
7. 1st-3rd cuneiforms

Diagnosis: Stress reaction of the 4th metatarsal

Teaching Point: It is not uncommon for x-rays to be normal yet have MRI exams showing significant edema of the marrow, adjacent periosteal edema and soft tissue swelling. When a clear fracture line or cortical disruption is not evident, this is termed stress reaction. Another common site is the posterior medial tibia where edema and periostitis are found usually following repetitive stress (i.e. shin splints).

We do one thing and we do it well. Choose the

MRI EXPERTS

