



## Maisonneuve fracture

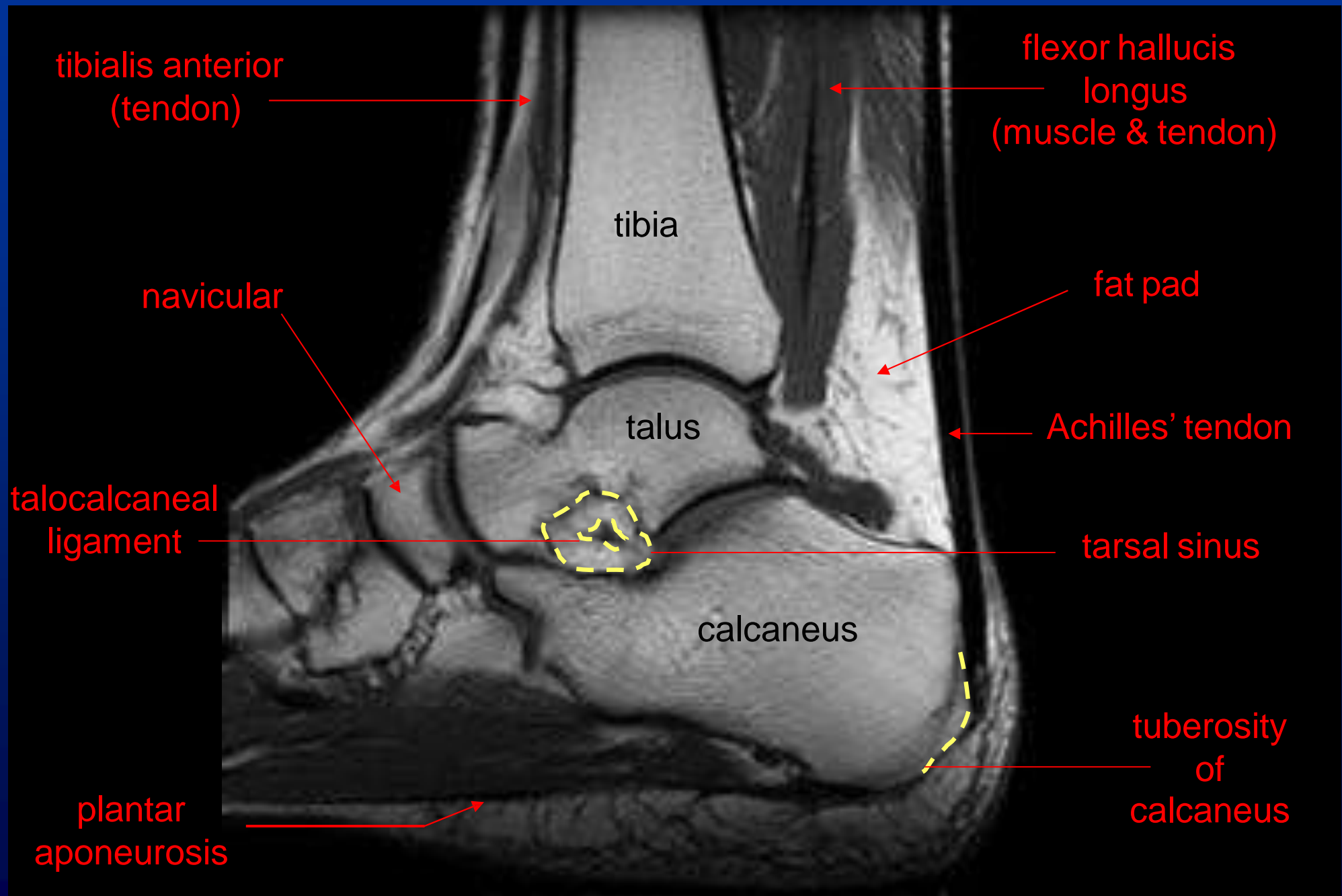


External rotation force to the ankle causes an avulsion of the medial malleolus

The force is transmitted through the interosseous membrane and exits, causing a fracture of the proximal fibula



# MR Imaging of the Ankle: Saggital Plane





sustentaculum  
tali

medial  
cuneiform

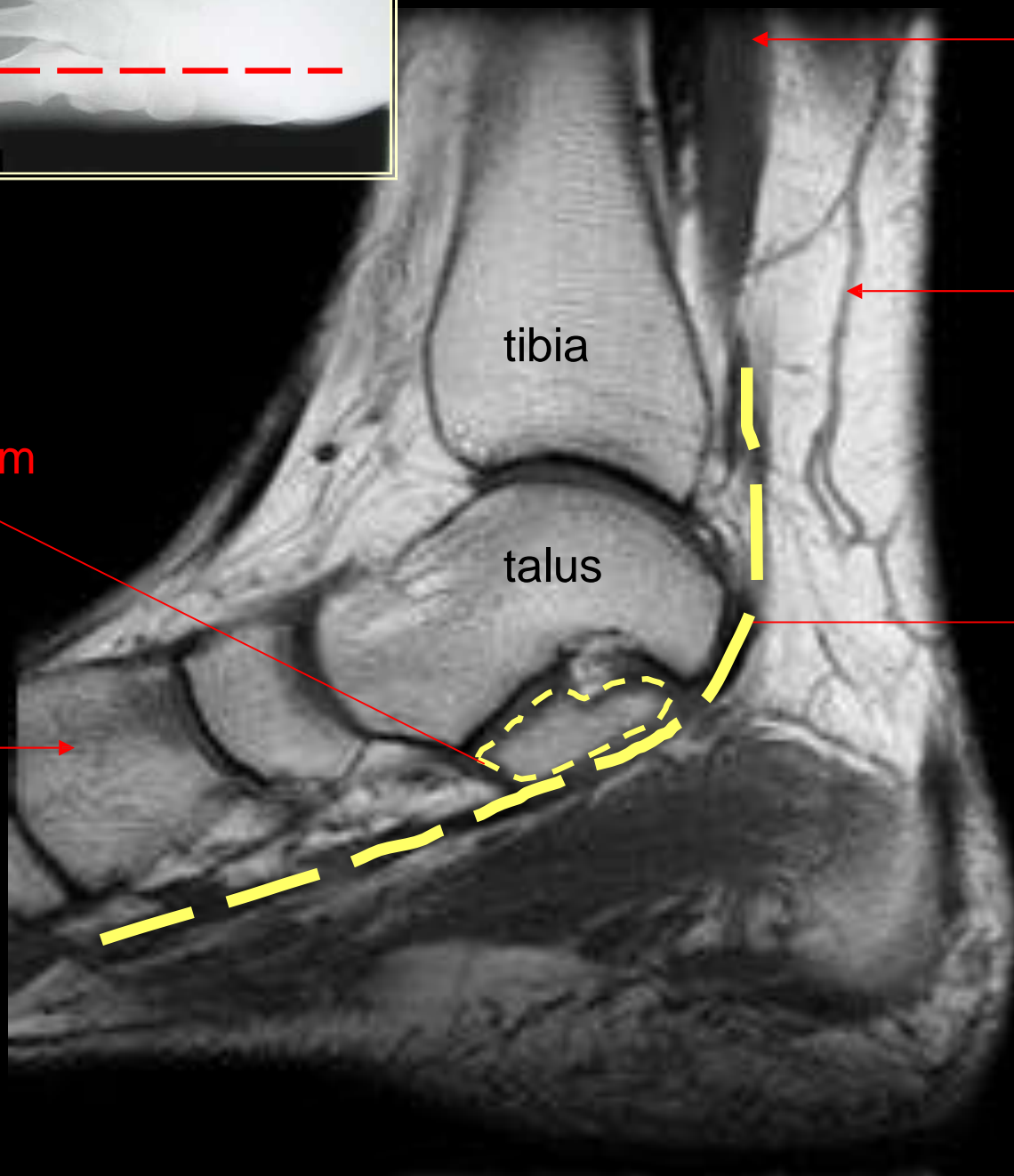
tibia

talus

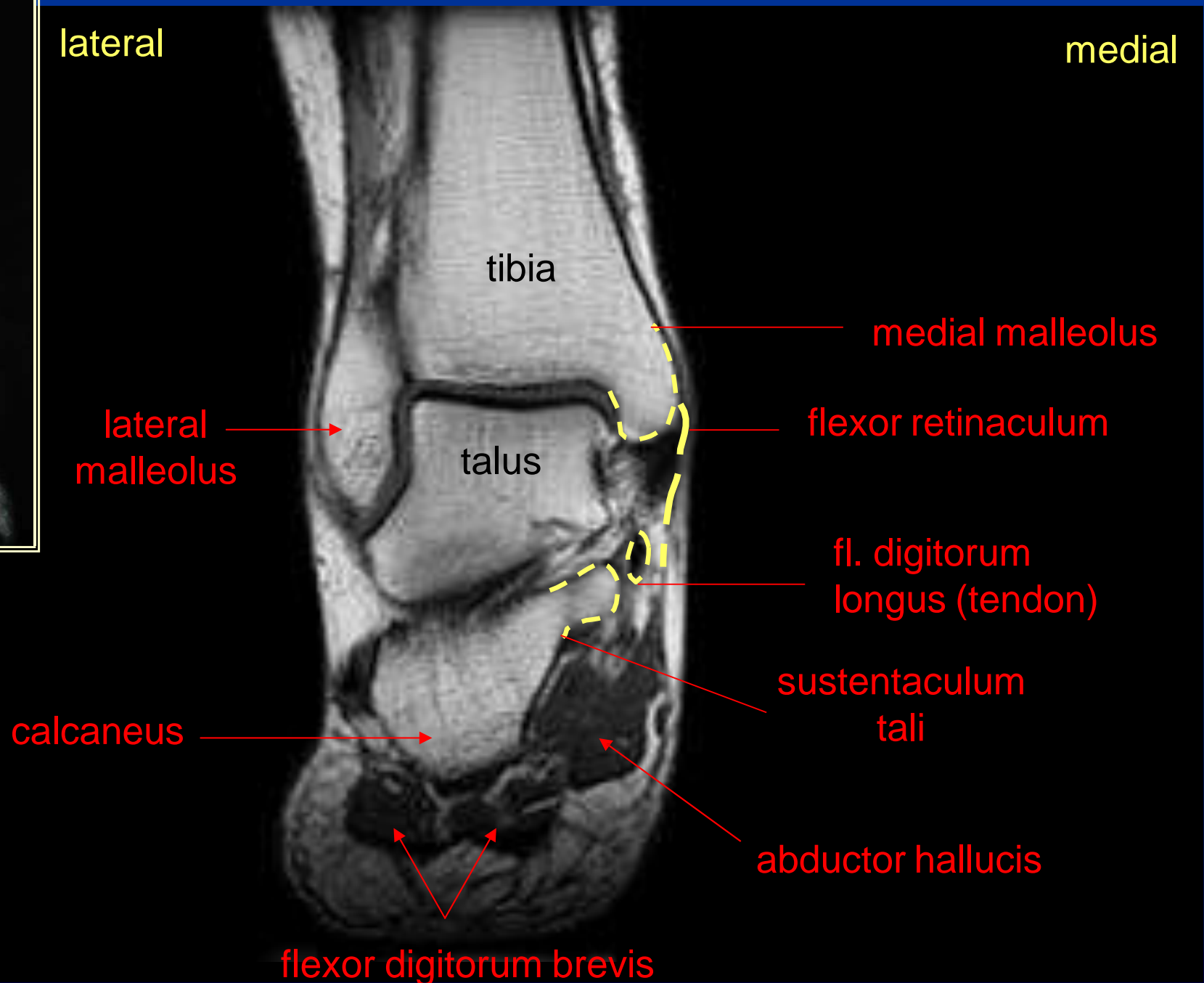
flexor hallucis  
longus

short saphenous  
vein

tendon of  
flexor hallucis  
longus

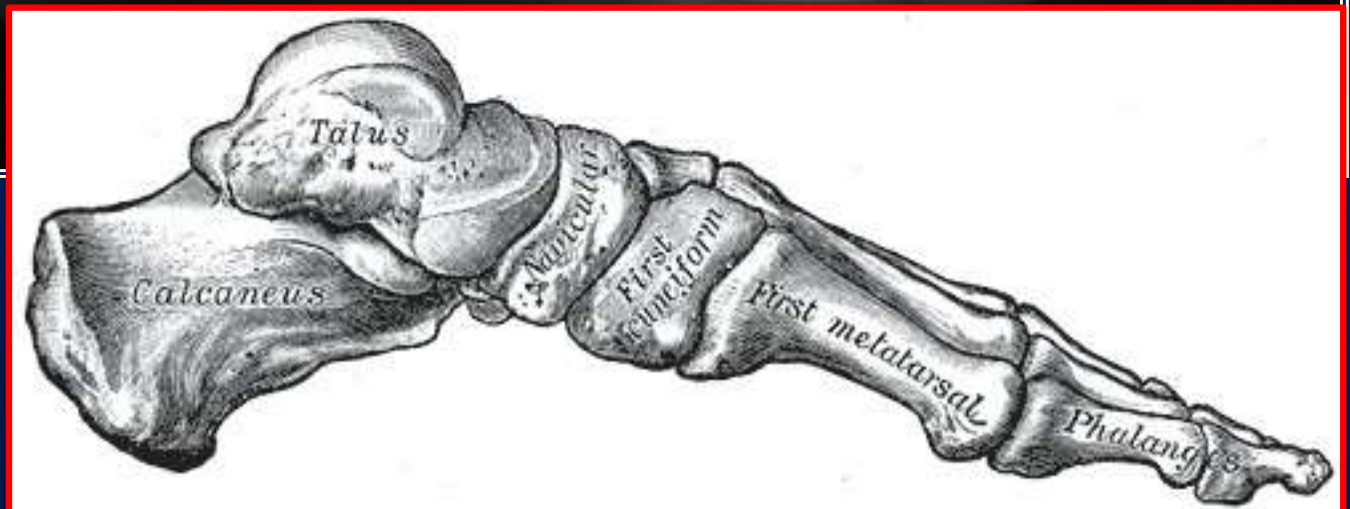
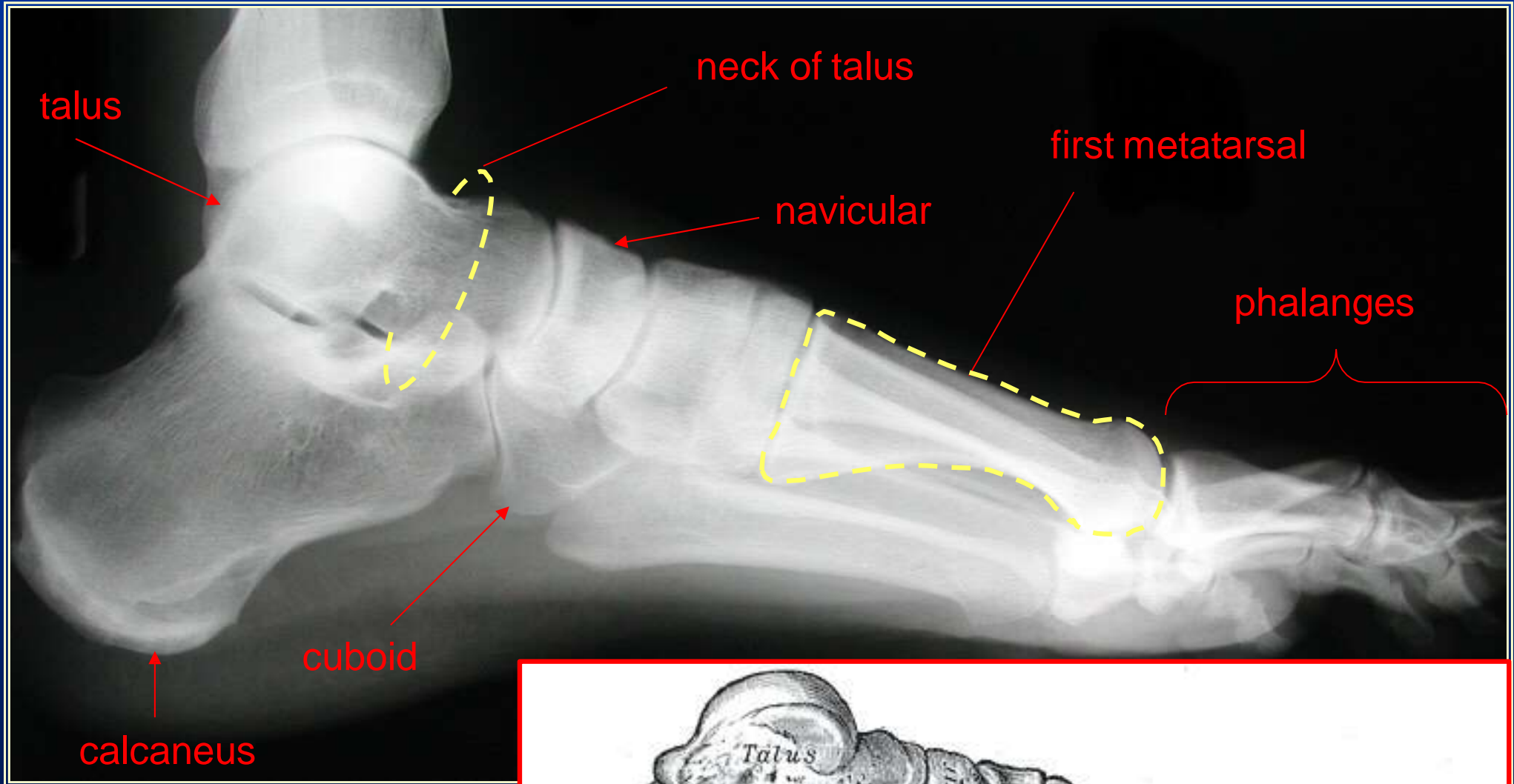


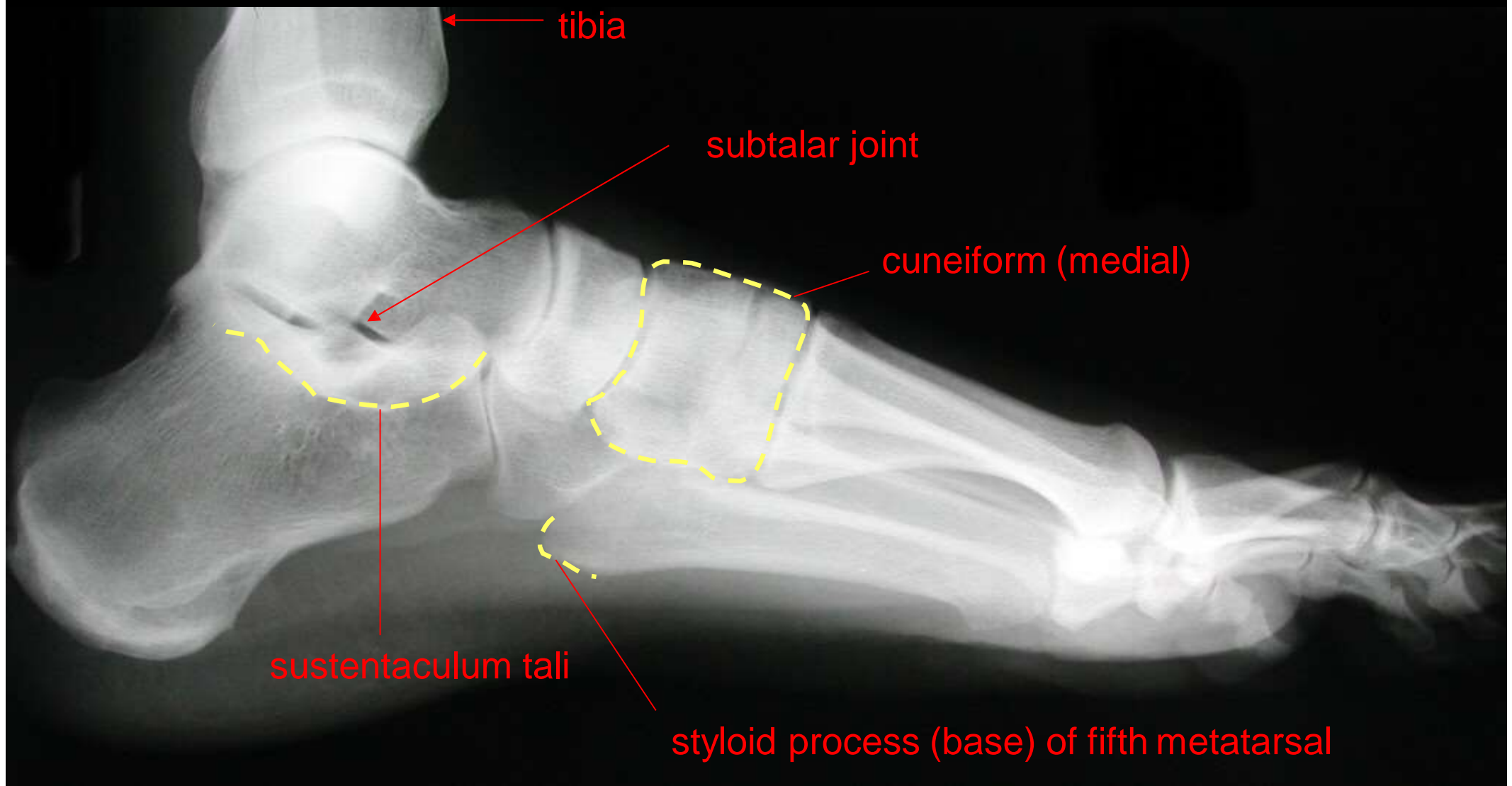
# MR Imaging of the Ankle: Coronal Plane



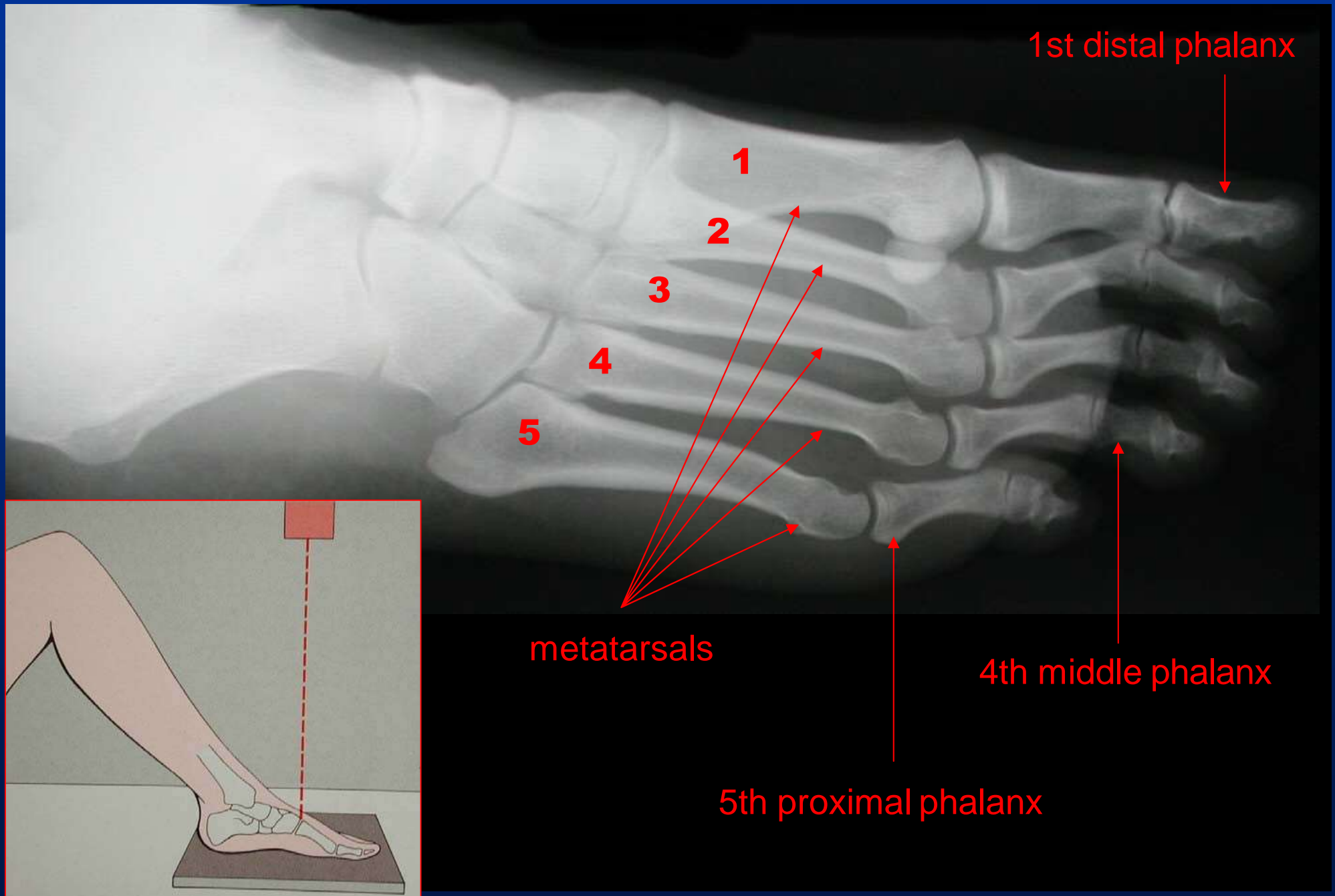


# Lateral View of the Foot

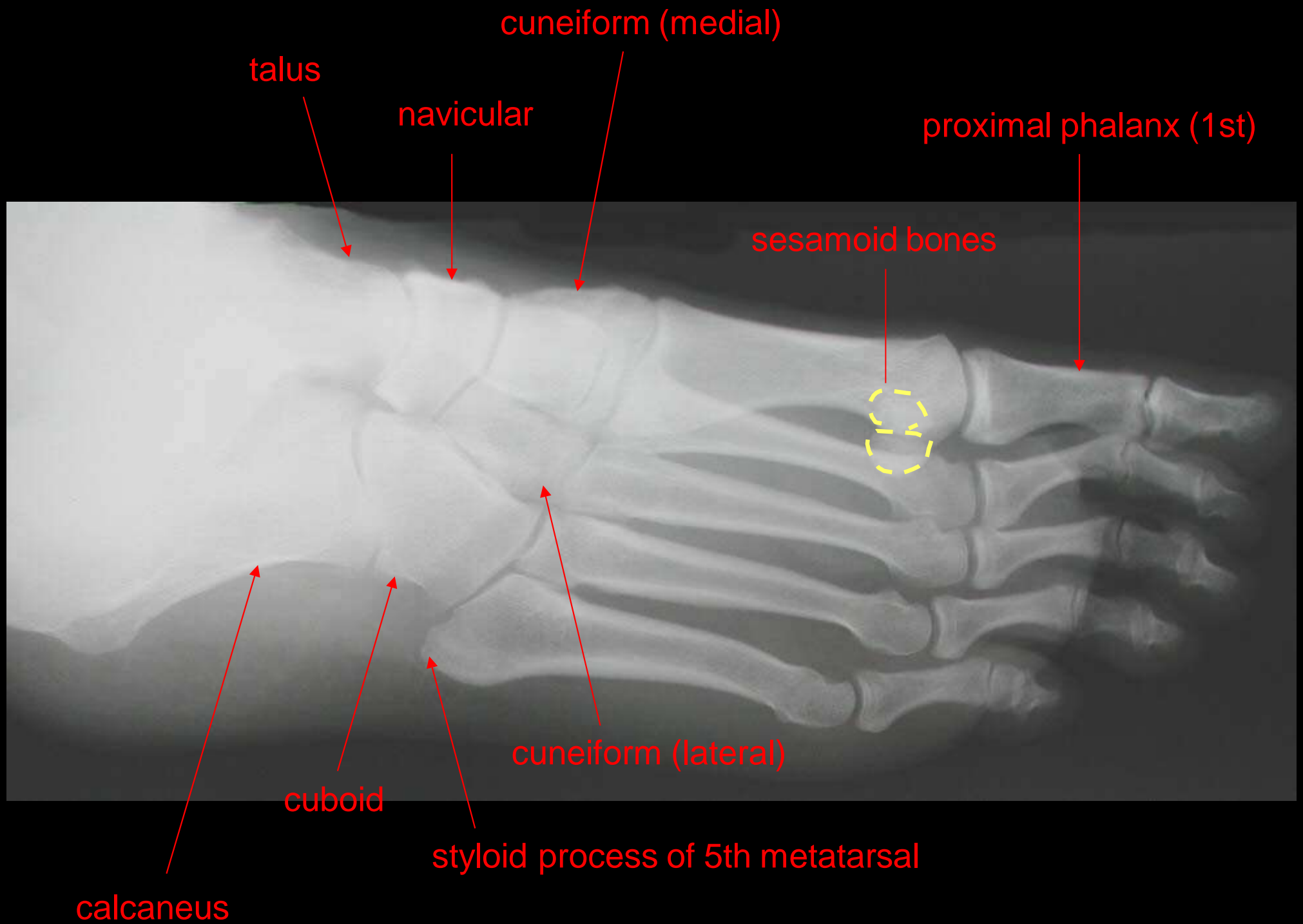




# Dorsiplantar View of the Foot







tarsometatarsal (Lisfranc's) joints



intertarsal (Chopart's) joint

# Arteriogram of the Foot



## What's Wrong With This Foot? (part 1)

normal





**Avulsion fracture of base of**

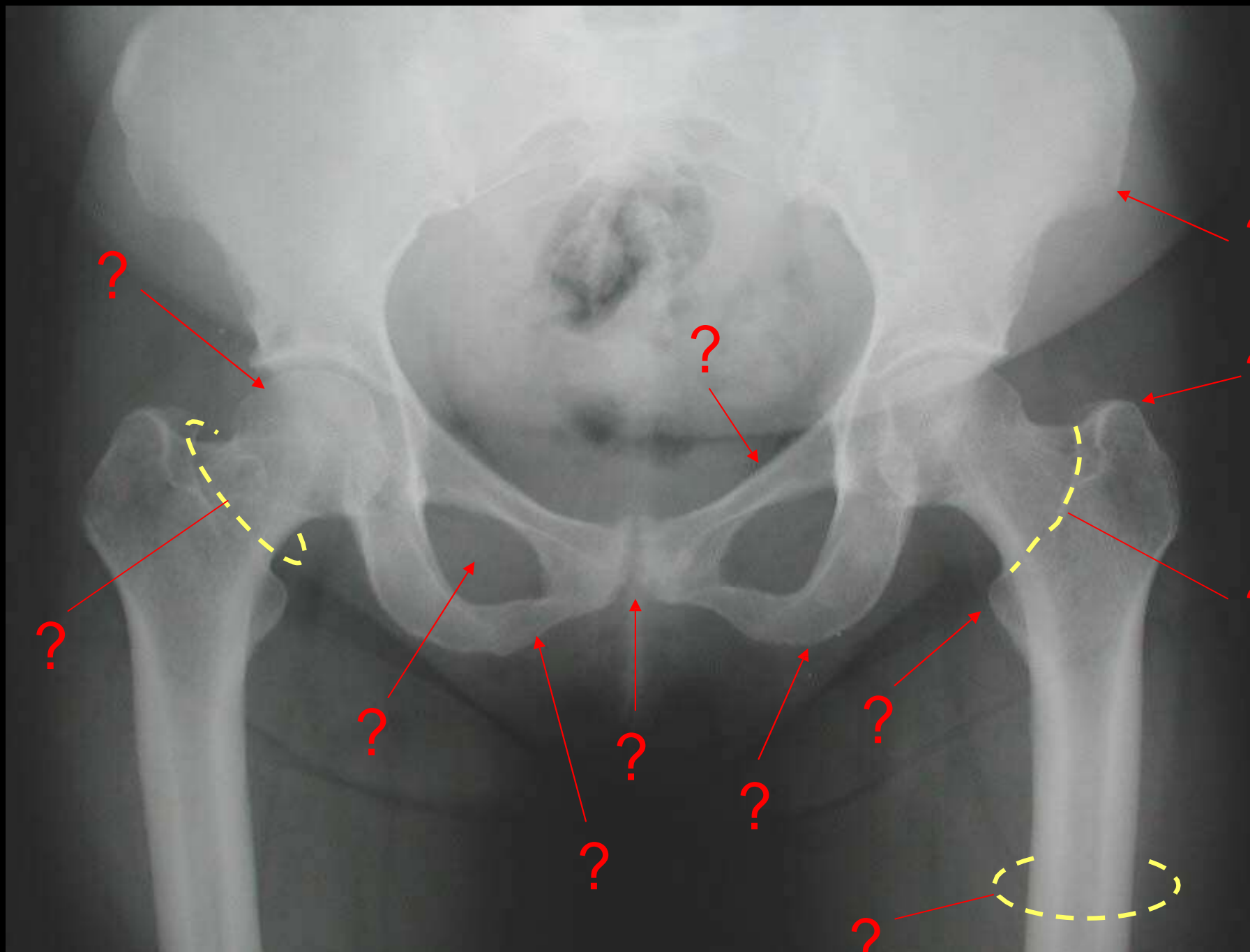
**Caused by which muscle?**

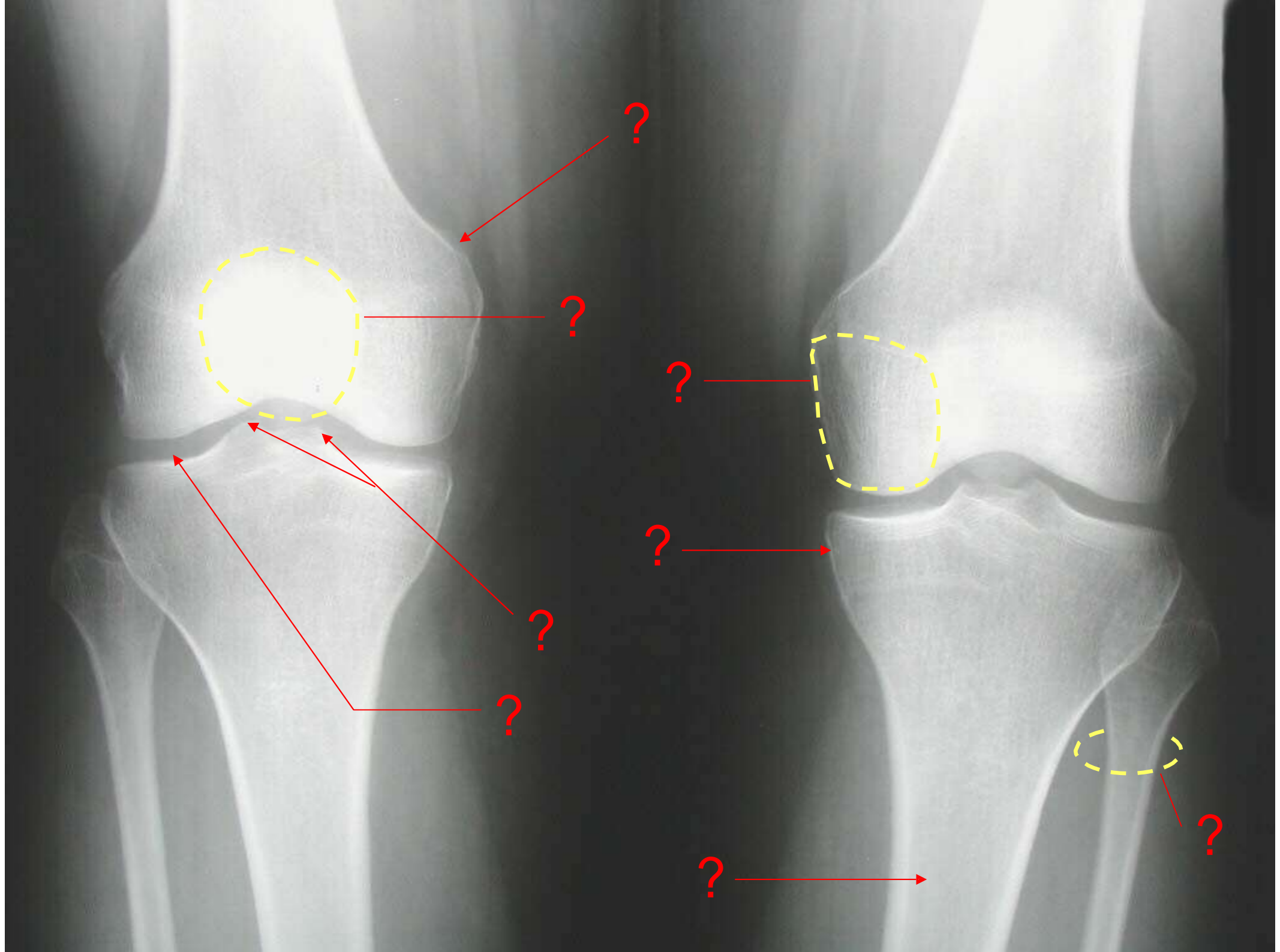
**Peroneus brevis**

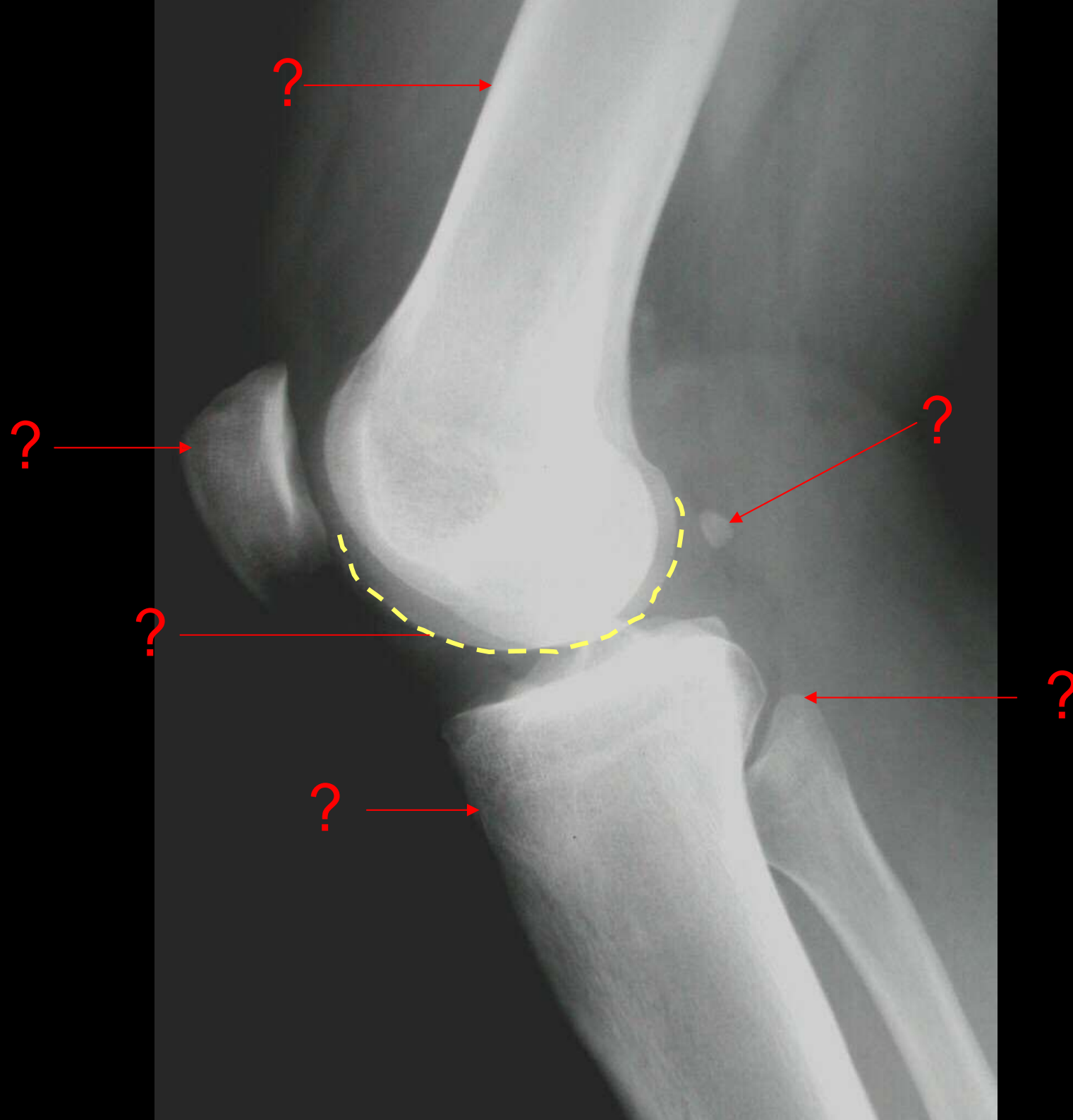




# **Additional Material**

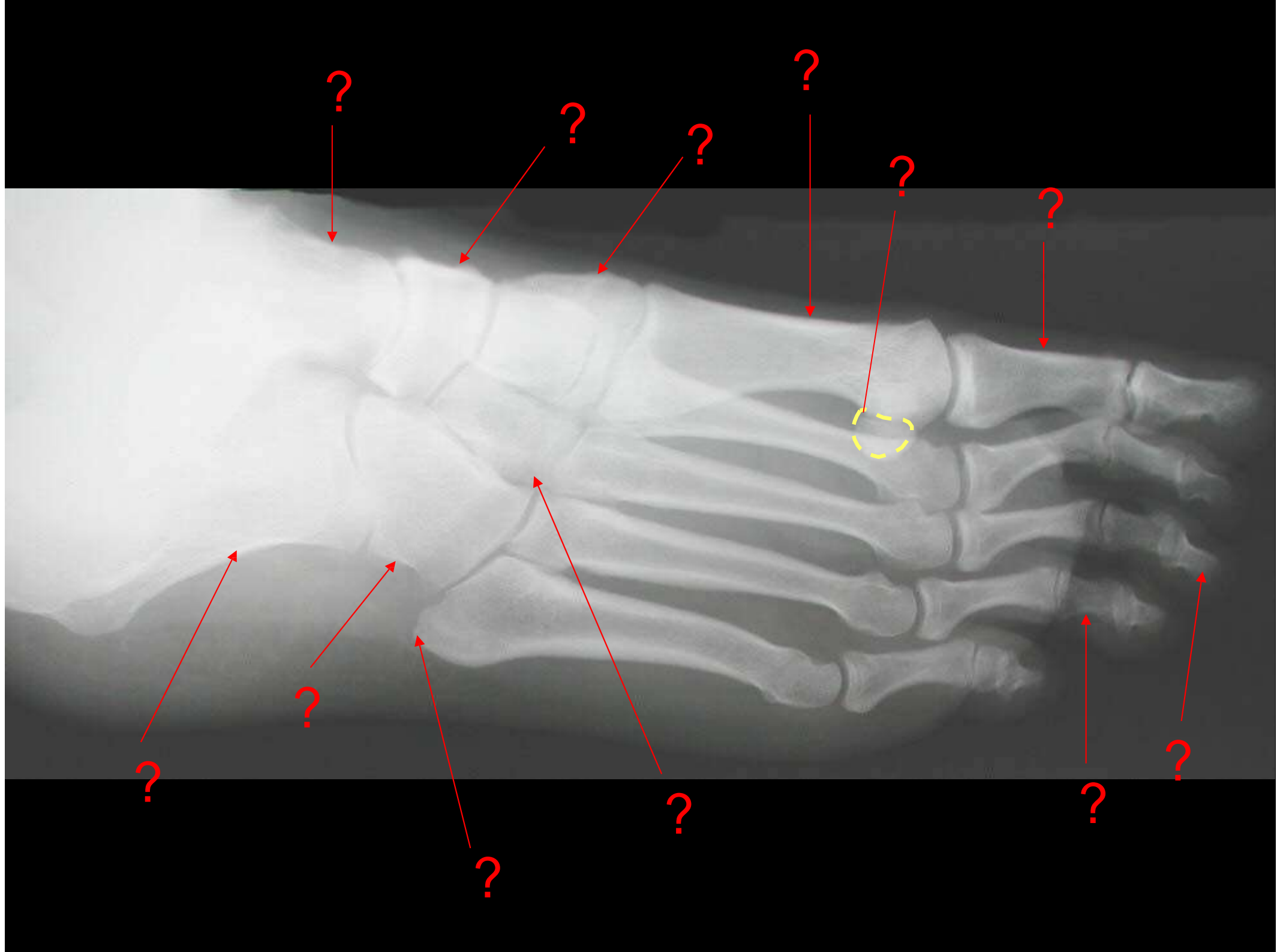












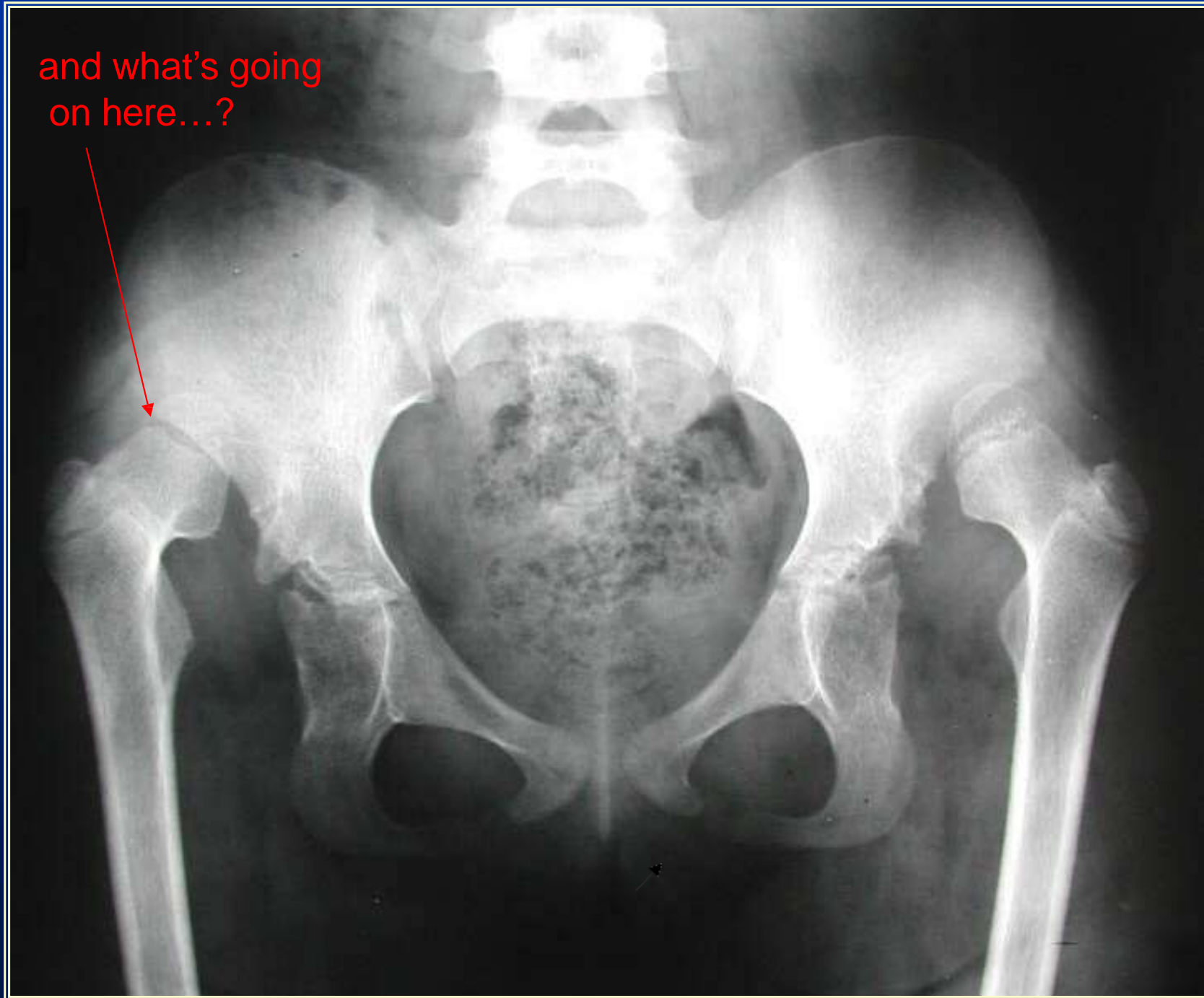
normal

not  
normal

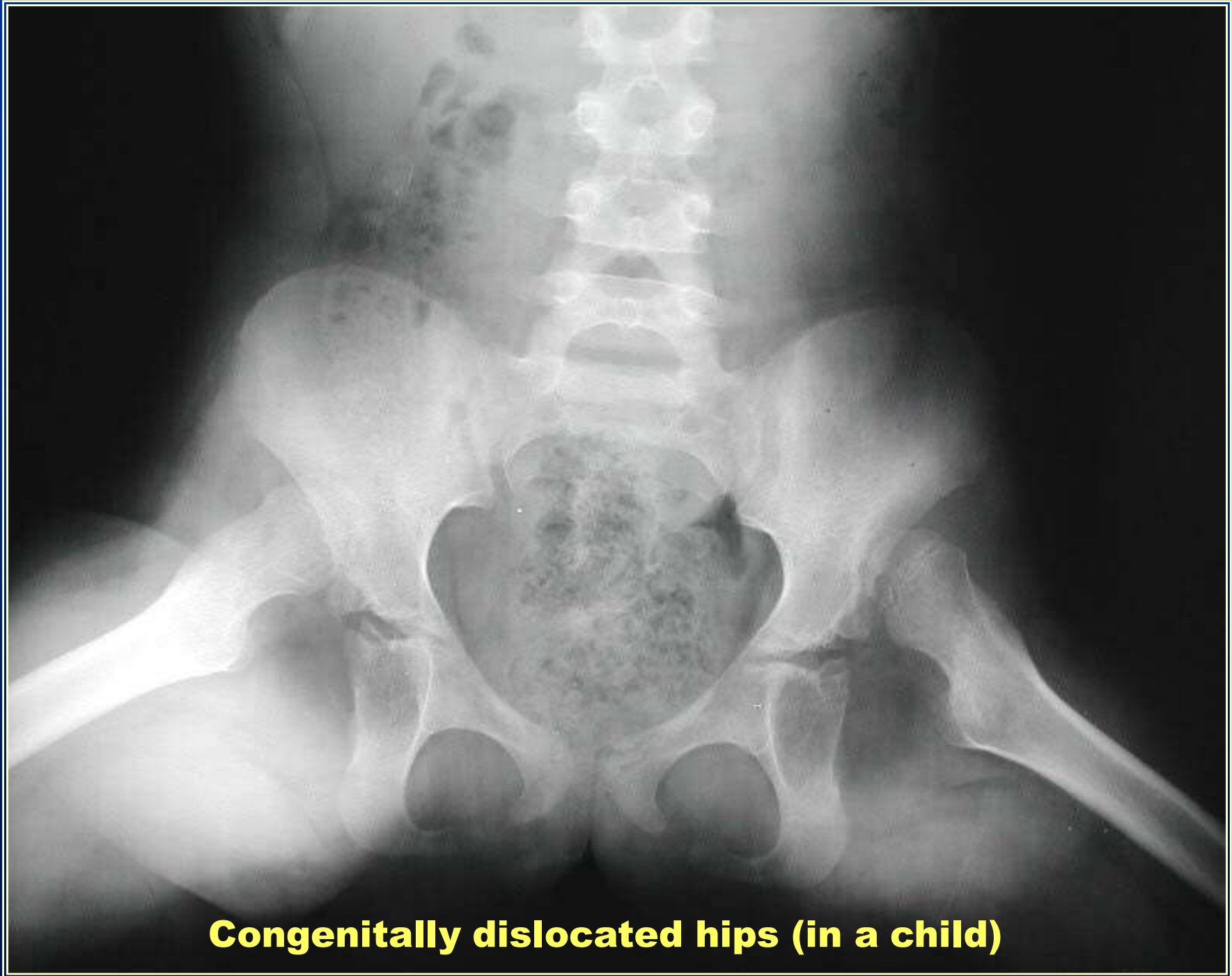
**Congenital Dislocation of the hip**



## What's Wrong With These Hips? (part 1)



## **What's Wrong With These Hips? (part 2)**



**Congenitally dislocated hips (in a child)**

## What's Wrong With This Hip? (part 1)

**A 47 year old male with a history of corticosteroid use presents with hip pain**



not normal

normal



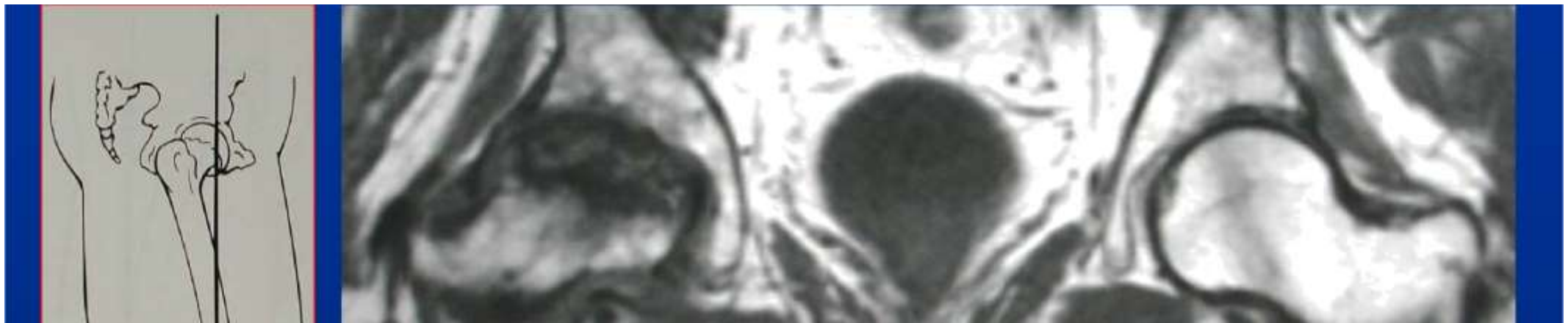
## One More Piece of the Puzzle... A Technetium Bone Scan

**Phosphate compounds  
labelled with radioactive  
Tc are injected into  
the patient**

**The labelled compounds  
are deposited in bone**

Areas of bone with  
increased turnover show  
up as “hot spots” (spots  
of greater density) on the  
scan

In this patient, the right  
femoral head is “hot” while  
the left femoral head is not.  
Which begs the question,  
“Why?”



I, ' not normal "

J normal



\* M' Avascular necrosis of the femoral head "

A 30 year-old male presents with knee pain. Significant medical history includes a skiing injury one year ago.



# What's Wrong With This Knee?

Perhaps a coronal MR can help...

**A thickened MCL with partial ossification**

normal

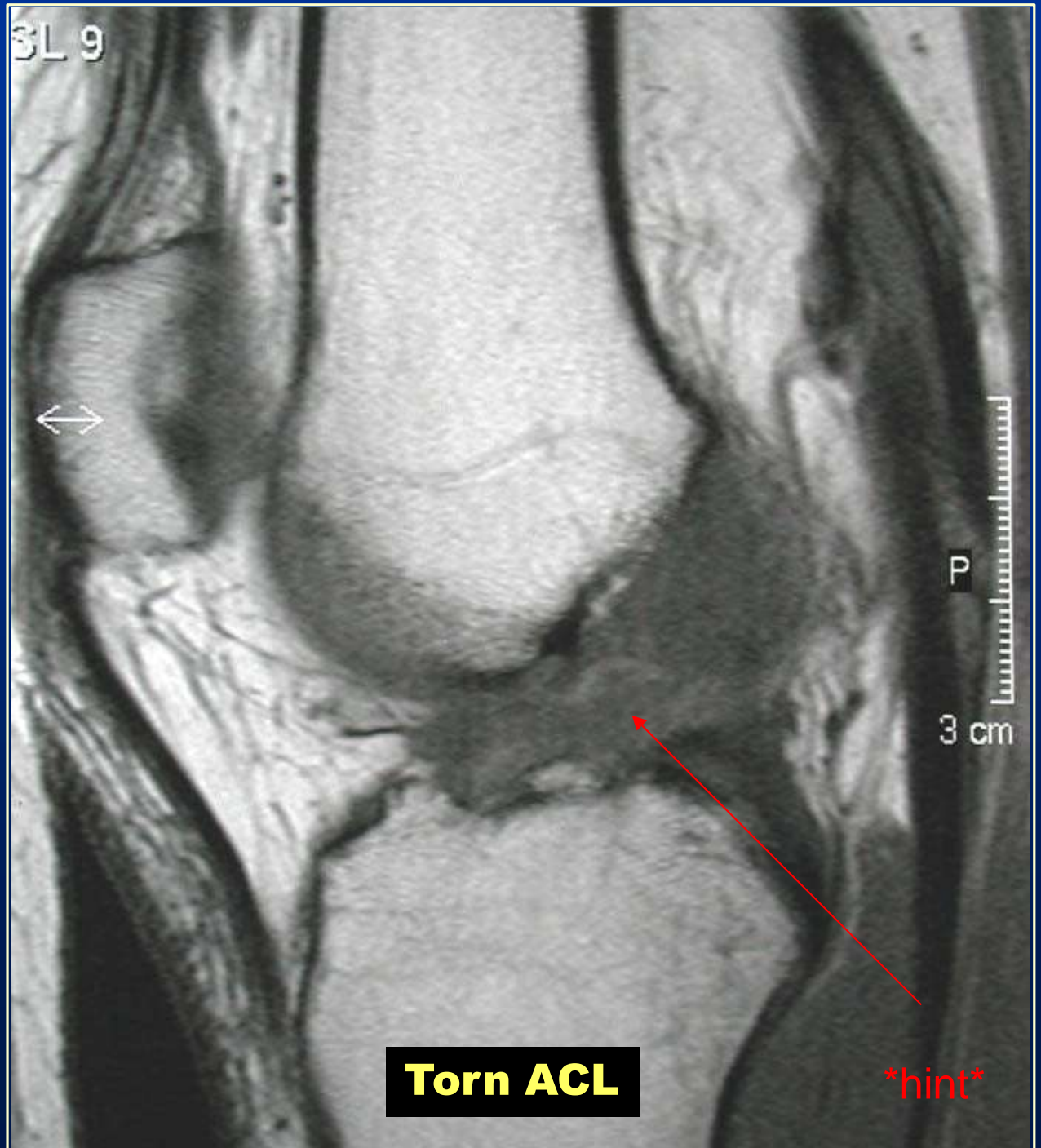




# What's Wrong With This Knee?

## Saggital MR images

normal





## What's Wrong With This Leg?

Hmmm...  
This one's  
tricky





**Hint:**  
the patient

And what's  
this?



## **What's Wrong With This Foot? (part 2)**

**Gas gangrene with some  
vascular calcification**



## What's Wrong With This Ankle? (part 1)



## What's Wrong With This Ankle? (part 2)



**Fracture of the talus**



# What's Wrong With This Ankle?

**Ankle joint  
effusion**



**normal**





## What's Wrong With This Foot?



**Heel spur**

