

MICOD -09/04/24

Case contributor – Dr. Neeti Ajay Gupta

MI-COD

MSS INDIA- Case Of the Day



31 yr old woman (dancer);
c/o pain in the region of head of 1st metatarsal



What abnormality do you see on radiographs?

How would you like to evaluate further?

MICOD case answer

#mskradiology_bullets
@drneeta.radiology@gmail.com



Lateral hallux
sesamoid fracture

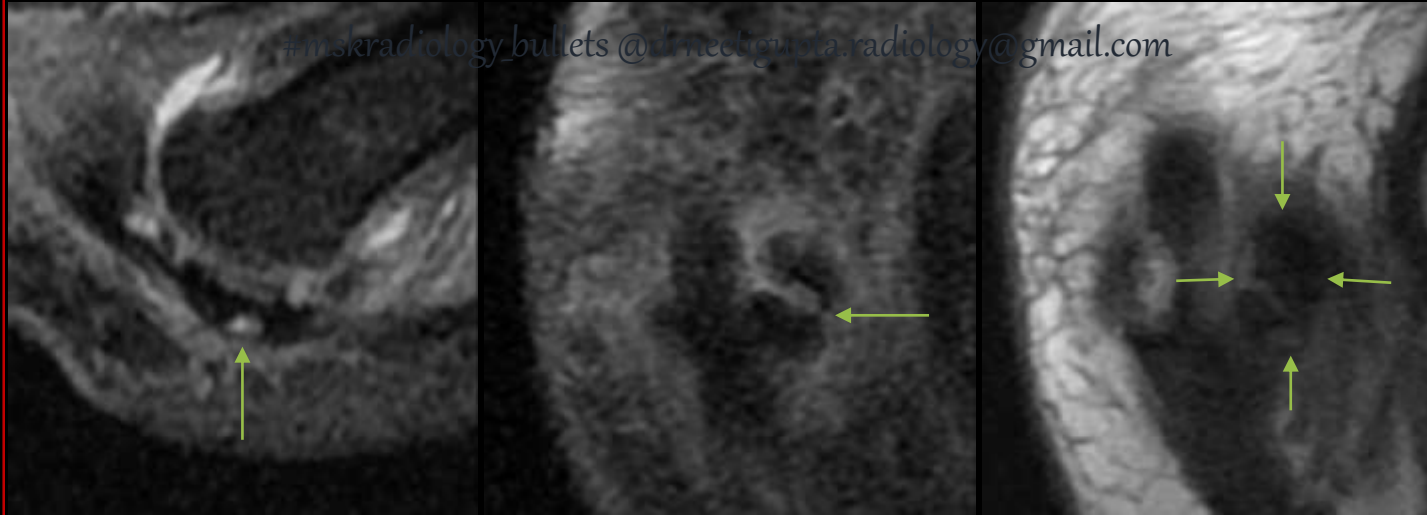


Lat.



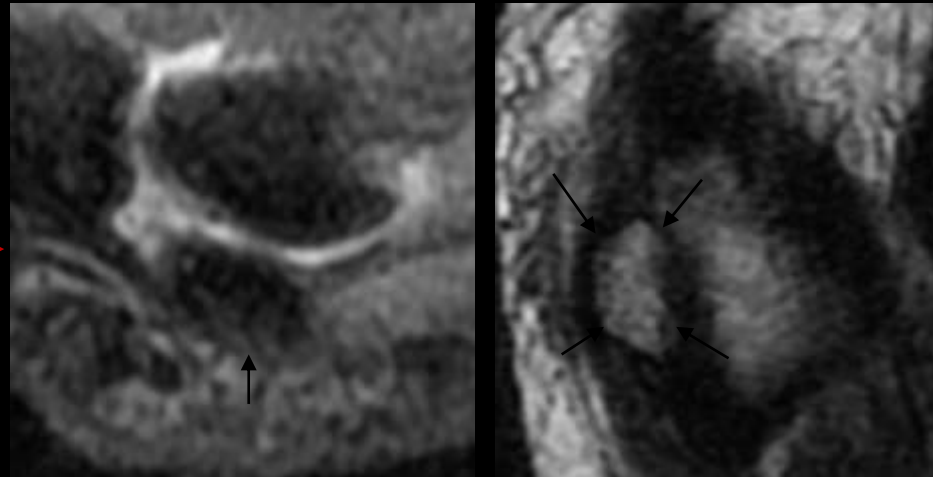
Med.

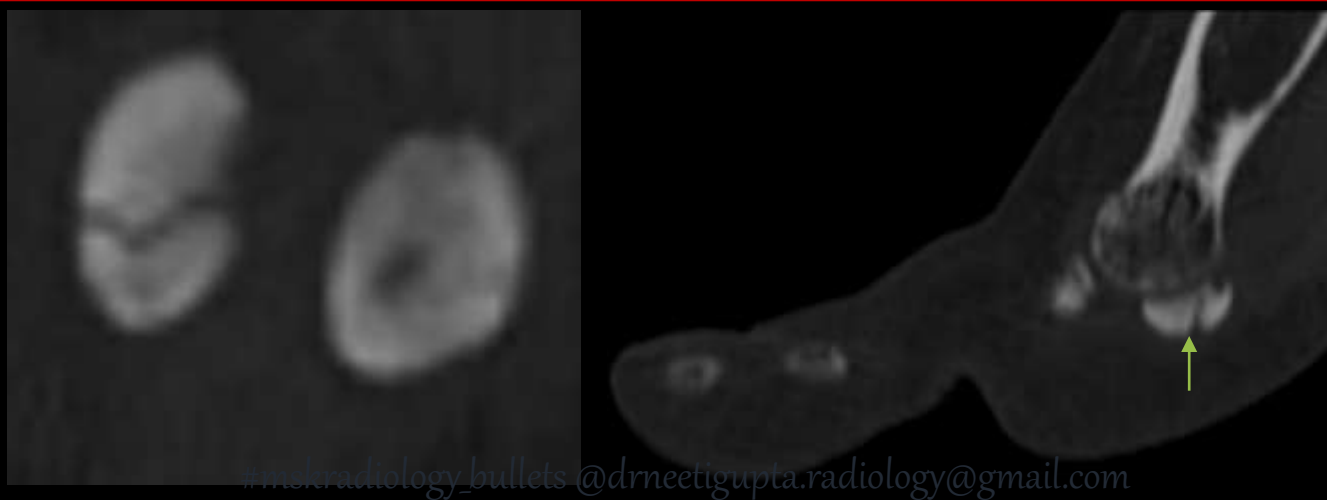
MRI was performed for further evaluation



Abnormal (hypointense) marrow signal and mild collapse of “lateral” hallux sesamoid bone - related to **sesamoid bone avascular necrosis**

Normal
“Medial” hallux
sesamoid
of same side
for comparison





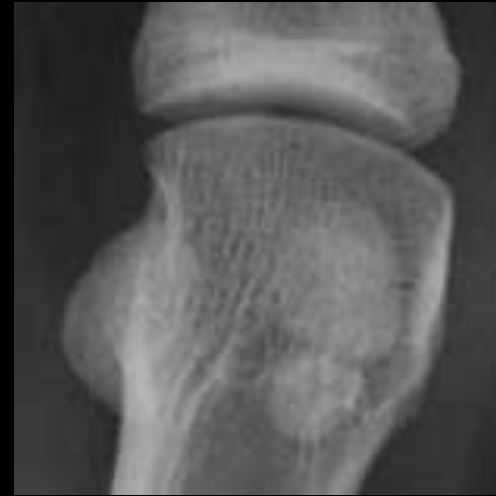
CT scan – lateral hallux sesamoid fracture with sclerosis, fragmentation and mild collapse in keeping with secondary avascular necrosis.

- AVN / Osteonecrosis may be caused by a # of the sesamoid bone
- It maybe difficult to differentiate between a bipartite sesamoid vs sesamoid fracture
- Faulty ossification leads to a multipartite sesamoid bone in up to 30% of individuals.
- Although either sesamoid can be affected, lateral sesamoid is subjected to greater loads, therefore, more prone to AVN
- **D/Ds** : infections; injuries with fractures; gout and other crystal deposition diseases; inflammatory arthritides; sesamoiditis dislocation; sesamoid osteoarthritis
- **Treatment** – elimination of weight bearing

SESAMOID FRACTURE

V/S

BIPARTITE SESAMOID

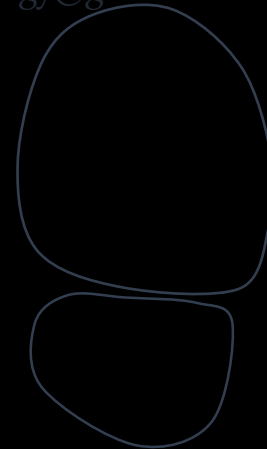


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Irregular lucency forming fragments that fit into each other like a jig-saw puzzle

The affected sesamoid is the **same size** as the normal sesamoid



Well-corticated **smooth** margins of the bone fragments, with rounded edges

The affected sesamoid is **larger** than the normal sesamoid