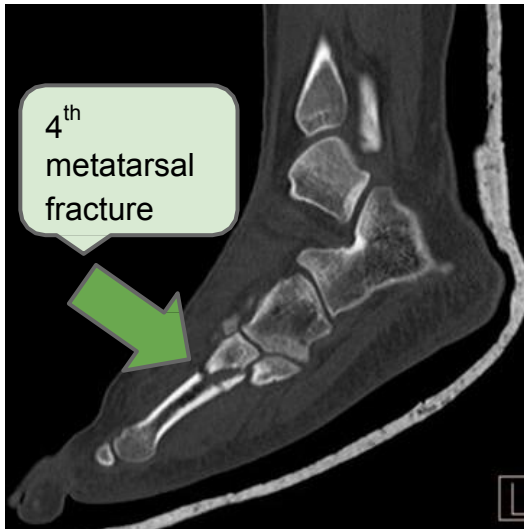
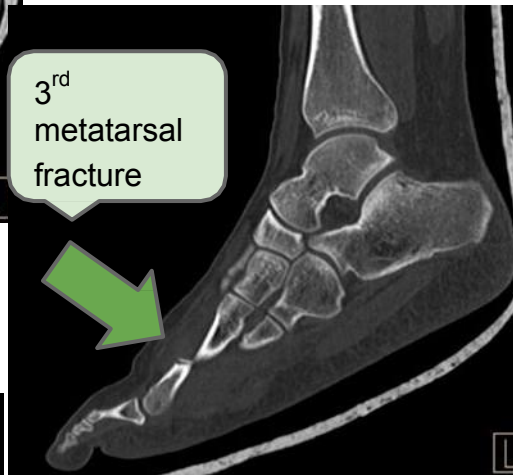
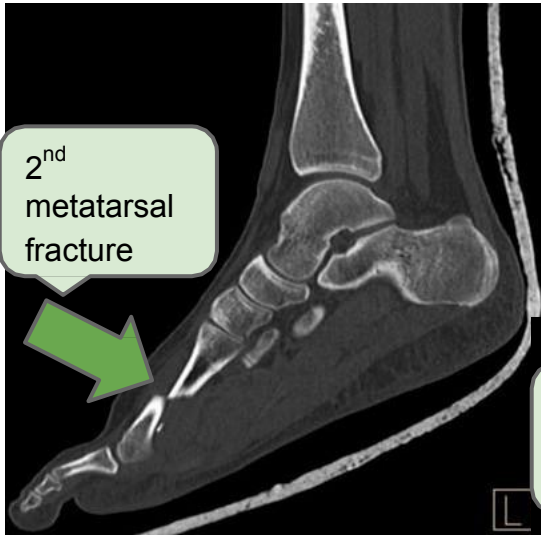


# SAMPLE REVIEW: FOOT FRACTURE

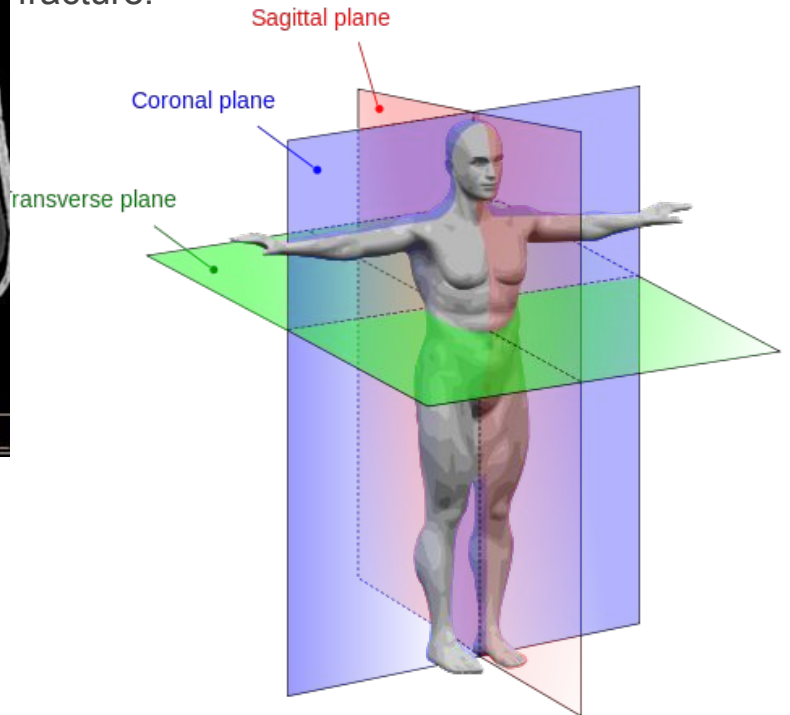


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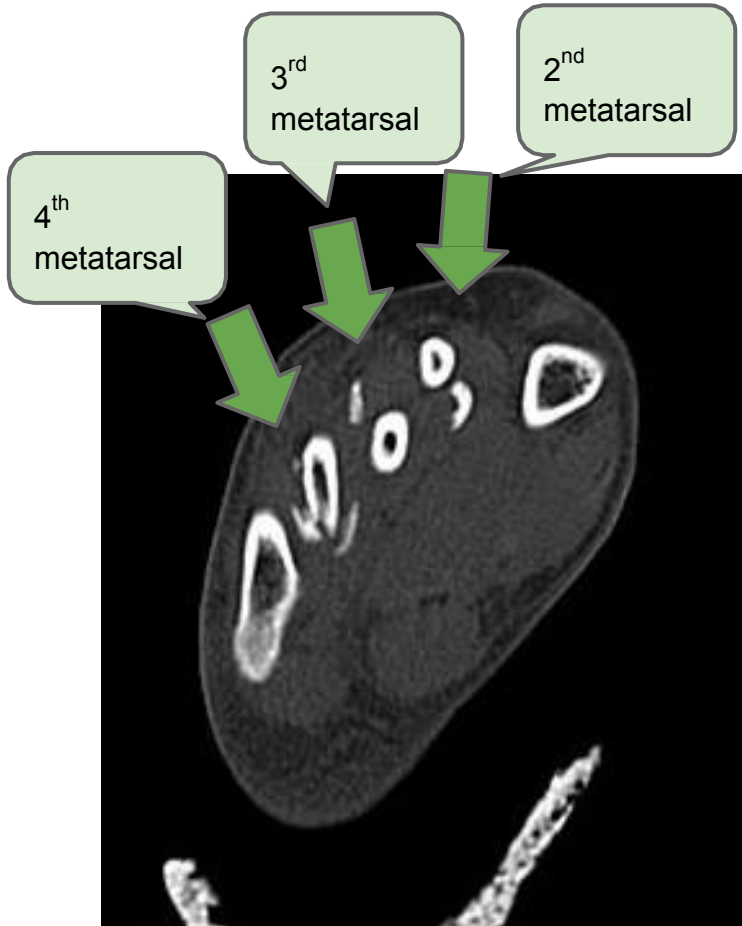
Contents are confidential. Please be respectful of privacy.



These images obtained in the sagittal plane of the right foot, demonstrating displaced 2<sup>nd</sup> and 3<sup>rd</sup> metatarsal shaft fractures, and nondisplaced proximal 4<sup>th</sup> metatarsal fracture.

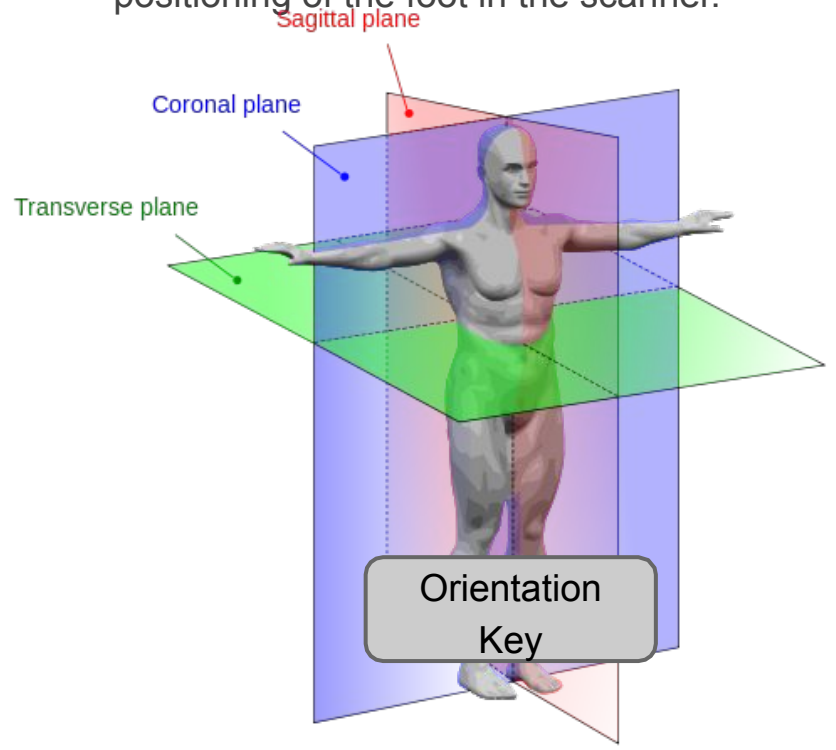


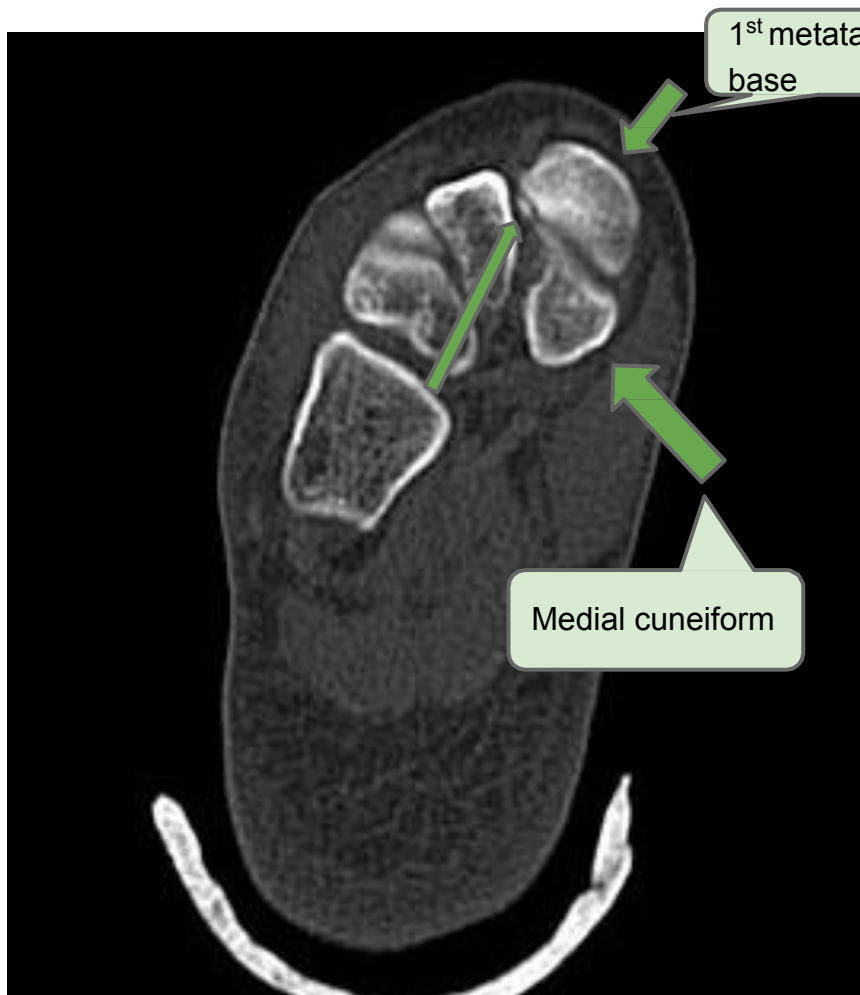
Sagittal plane



Coronal oblique plane

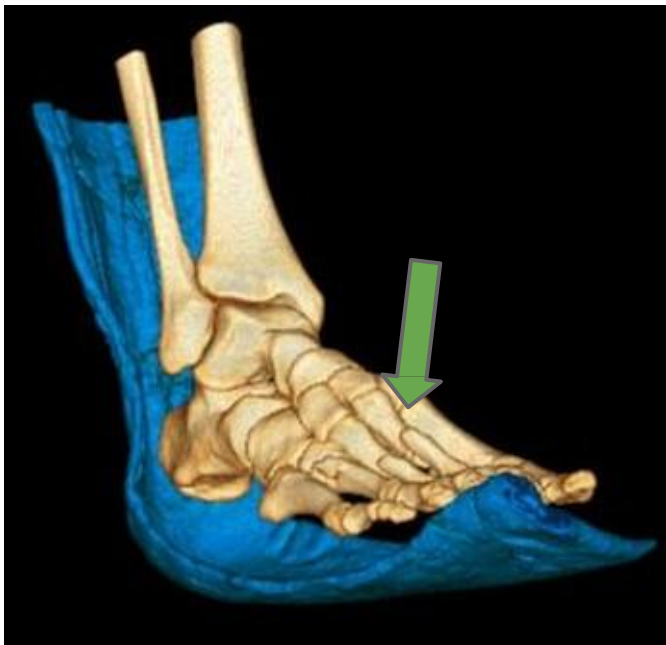
This image obtained in a coronal oblique plane shows all three metatarsal fractures. Coronal oblique simply means coronal plane with a slight angle. CT scans of the feet are often not taken in a true coronal plane due to positioning of the foot in the scanner.





Green arrow shows a very subtle finding in this case. This is a questionable small avulsion fracture involving the medial base of the 1<sup>st</sup> metatarsal. This is located near the attachment site of the Lisfranc ligament. This is only seen in one plane however. Therefore, this case may have a very subtle Lisfranc type injury. Imaging cannot completely assess the severity of a Lisfranc injury, even when there is no displaced fracture as in this case. Physical examination with dynamic maneuvers to test the Lisfranc joint is necessary to assess for joint stability.

Coronal oblique plane



3-D images from the CT scan show the metatarsal fractures, although not as well demonstrated on plain x-ray obtained same day.



In summary, this case demonstrates acute trauma to the right foot, with several metatarsal fractures. Two of these fractures are displaced, indicating the need for surgical therapy with open reduction internal fixation (ORIF). In addition, there is a subtle fracture of the 1<sup>st</sup> metatarsal base, compatible with a mild Lisfranc type injury.