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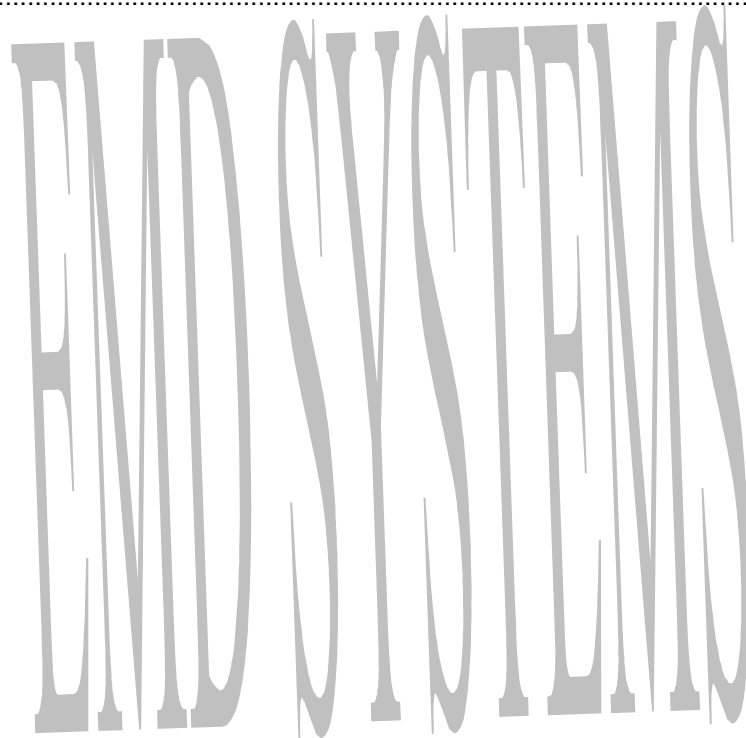
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Amendment sheet

Version No.	Release Date	Modified by Date	Reviewed by Date	Authorized by Date	Remarks
1.0		Resource DD/MM/YY			Initial Version

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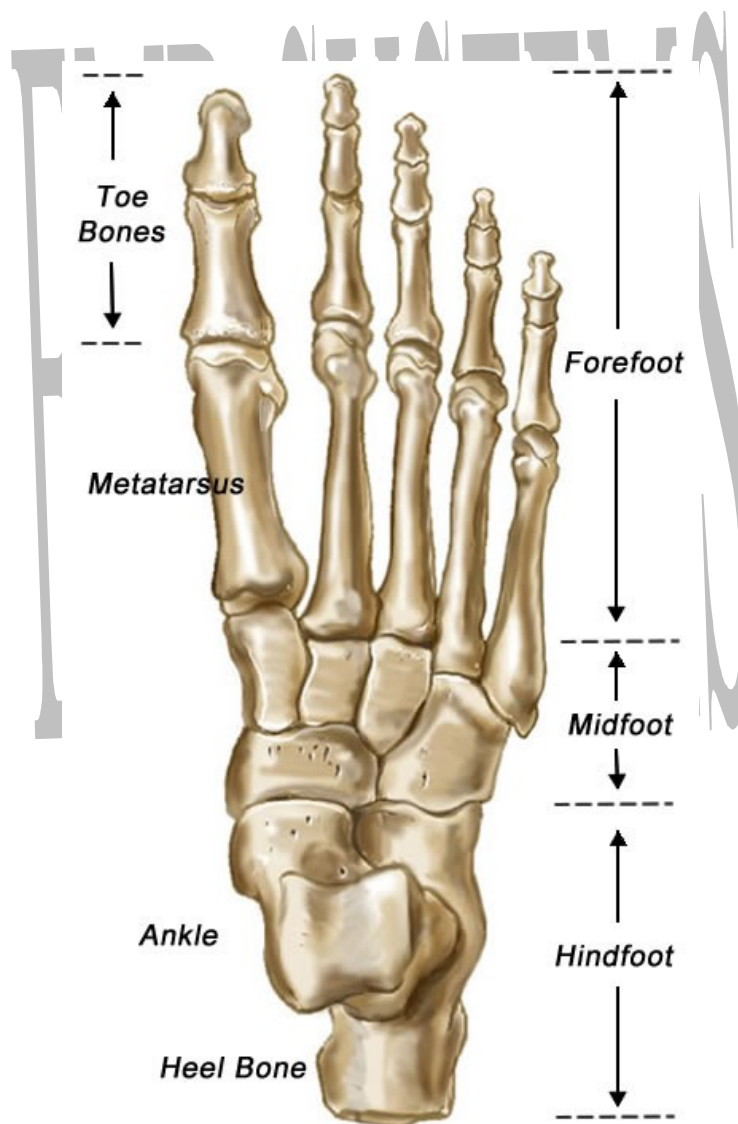
1. FOOT

1.1. Overview

Your foot is quite easy to find. Just look down at the end of your leg. The foot may look simple from the outside, but on the inside things are a lot more complex.

Between the foot and ankle there are 26 bones, 33 joints, and more than a hundred muscles, tendons, and ligaments.

The foot can be divided into three main parts: the forefoot, midfoot and hindfoot. The foot contains the proximal **tarsals** that form the ankle and heel; intermediate **metatarsals**; and the distal **phalanges** that form the toes.



1.2. Functions

1. Tarsals(Forefoot)

The forefoot is made up of the five toes. Similar to the fingers of the hand, the bones of the toes are called phalanges. The big toe has two phalanges while the other four toes have three phalanges. The forefoot also includes five proximal long bones, one for each toe, forming the metatarsus

2. Metatarsals(Midfoot)

The midfoot has five bones that form the arch of the foot. The midfoot is connected to the hindfoot and forefoot by muscles and the plantar fascia.

3. Phalanges(Hindfoot)

The hindfoot consists of the talus or ankle bone, and the heel bone. The two long bones of the lower leg, the tibia and fibula, are connected to the top of the talus to form the ankle

1.3. Major Diseases and Symptoms

S. No	Disease	Symptoms
1	Athlete's Foot - It (tinea pedis) is a fungal infection that usually begins between the toes. It commonly occurs in people whose feet have become very sweaty while confined within tight fitting shoes.	1.scaly rash that usually causes itching 2.stinging 3.burning
2.	Hammertoe -It is occur due to an imbalance in the muscles, tendons or ligaments that normally hold the toe straight .In other Words It is an abnormal bend in the middle joint of a toe	1.Pain at the top of the bent toe when putting on a shoe. 2.Corns forming on the top of the toe joint. 3.The toe joint swelling and taking on an angry red colour. 4.Difficulty in moving the toe joint - and pain when you try to. 5.Pain on the ball of the foot under the bent toe.
3	Blisters - A foot blister is a small, fluid filled bubble-like pocket that develops on the upper layers of skin. Most commonly caused by friction, they can also occur due to things such as infection, burns and chemical exposure.	symptoms depend on the type of infection. mostly like 1.redness 2.severe itching 3.small bumps on the affected skin.

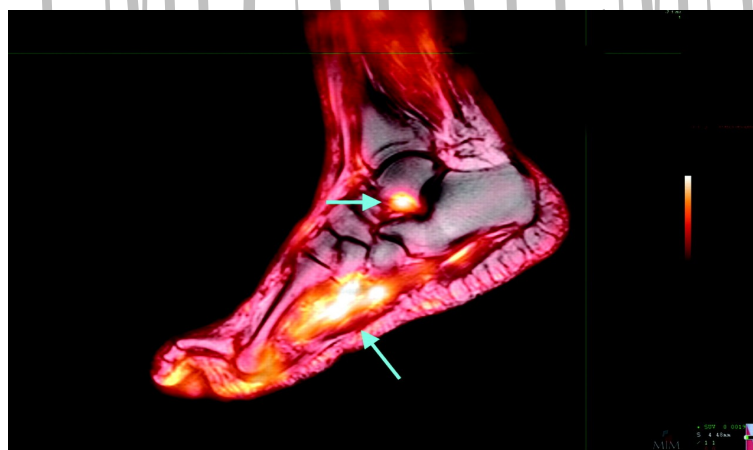
1.4. Radiology Examinations

1.4.1 Applicable Radiology Examinations

Radiology Examination Name	Is Applicable (Yes/No)
CT (Computed Tomography)	yes
BD (Bone Densitometry)	yes
MG (Mammography)	No
(MRI)MR (Magnetic Resonance)	yes
NM (Nuclear Medicine)	yes
RT (RadioTherapy)	yes
US (Ultrasound)	yes
CR (Computed Radiography)	yes
DX (Digital Radiography)	No
(PET)PT (Positron Tomography)	yes
RF (Radio Fluoroscopy)	No
SC (Secondary Capture)	No
XA (X-Ray Angiography)	No

1.4.2 (PET)PT (Positron Tomography)

Fused FDG-PET and magnetic resonance images of a patient with diabetic foot and suspected bone infection. The FDG-PET image shows significant uptake in the soft tissue in the plantar aspect of the foot (suggestive of cellulitis); in addition, it reveals a focus of abnormal activity in the talus (consistent with talar bone osteomyelitis).

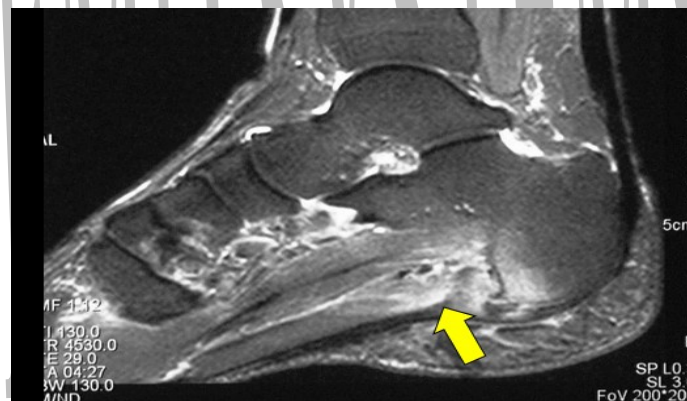


1.4.3 CT ()



Skin callus and talar plantar flexion deformity in a diabetic patient with neuroarthropathy. Sagittal T1 (A), and T2-weighted with fat-suppressed (B) images revealed focal hypointense area in subcutaneous fat in the midfoot in both sequences (arrows) with no accompanying soft tissue changes consistent with callus. Subchondral marrow edema at intertarsal joints is a result of neuroarthropathy.

1.4.4 MR ()



the fibrous ligament at the base of the foot, an inflamed plantar fascia can cause severe pain when walking or running. Treatment of plantar fasciitis begins with rest, icing, and anti-inflammatory medications.

1.5. References

S. No	URL
1	https://www.boundless.com/physiology/textbooks/boundless-anatomy-and-physiology-textbook/skeletal-system-parts-of-the-skeleton-7/the-lower-limb-88/tarsals-metatarsals-and-phalanges-the-foot-498-5980/
2	http://www.kidport.com/RefLib/science/HumanBody/SkeletalSystem/Foot.htm
3	http://www.foot-pain-explored.com/blisters-on-feet.html
4	http://www.mayoclinic.org/diseases-conditions/hammertoe-and-mallet-toe/home/ovc-20178097

5	http://www.mayoclinic.org/diseases-conditions/athletes-foot/home/ovc-20235864
6	https://www.drugs.com/health-guide/blisters.html
7	http://www.webmd.boots.com/foot-care/hammer-toes-causes-symptoms-treatment-prevention
8	http://diabeticfootandankle.net/index.php/dfa/article/view/18754

1.6. Glossary

S.no	Term	Description
1	phalange	A bone within the digit
2	metatarsal	A bone from the center of the foot that articulates with the tarsals and phalanges.
3	tarsal	A bone forming part of the ankle or heel
4	metatarsus	any of the bones of the foot.
5	Subchondral	Subchondral bone is the layer of bone just below the cartilage in a joint.
6	neuroarthropathy	A joint disorder caused by loss of joint sensation
7	FDG-PET	fluoro-D-glucose positron emission tomography