



“बेटी बचाओ, बेटी पढ़ाओ”

JAYOTI VIDYAPEETH WOMEN'S UNIVERSITY, JAIPUR
FACULTY OF PHYSIOTHERAPY & DIAGNOSTICS

Faculty Name : JV'n Ankita
Program : BPT 3rd Semester
Course Name : Radio diagnosis
Topic Name : LOWER LIMB X-RAYS (FOOT XRAY)

Program Outcome :

It plays an important role in health sector, provides knowledge about the treatment of patient by the help of physiotherapy.

Course Outcome :

Understand the fundamentals and basic physics which is used or responsible for the imagining process in medical sector and how to do the image interpretation.

Academic Day starts with –Greeting with saying ‘**Namaste**’ by joining Hands together following by 2-3 Minutes Happy session, Celebrating birthday of any student of respective class and **National Anthem**.

Review of previous Session- **ANKLE XRAY**

Today We will discuss about- **FOOT XRAY**.

Lesson deliverance (ICT, Diagrams & Live Example)- ICT, Diagrams

➤ Diagrams

Introduction & Brief Discussion

FOOT XRAY:-

A foot X-ray, also known as a foot radiograph, is a medical imaging procedure that uses X-rays to create detailed images of the bones, joints, and soft tissues in the foot. Like X-rays of other parts of the body, foot X-rays are commonly used for diagnostic purposes to evaluate a wide range of foot conditions and injuries.

INDICATION :-

1. Fractures:-

Foot X-rays are frequently used to diagnose fractures (breaks) in the bones of the foot, including the metatarsals (long bones of the foot), phalanges (toe bones), and tarsal bones (bones of the mid foot and hind foot).

2. Arthritis:-

They can help identify signs of arthritis in the foot joints, such as joint space narrowing and the presence of bone spurs.

3. Alignment Issues:-

Foot X-rays can be used to assess the alignment of the bones in the foot, which is important in conditions like bunions or flat feet.

4. Infections:-

They can detect signs of bone infections (osteomyelitis) or soft tissue infections.

5. Tumors:-

Foot X-rays may be used to detect the presence of tumors or abnormal growths in the bones or soft tissues of the foot.

6. Foreign Bodies:-

In cases where a foreign object is suspected to be lodged in the foot, X-rays can help locate and identify the foreign body.

The procedure for obtaining a foot X-ray is similar to that of other X-ray examinations. The patient is usually asked to stand, sit, or lie down depending on the specific area of the foot being examined. The X-ray machine is positioned accordingly, and the patient is instructed to hold still while the images are captured.

Foot X-rays are generally considered safe, as they involve minimal exposure to ionizing radiation. However, healthcare providers take precautions to limit radiation exposure, especially in the case of pregnant individuals or children. In some situations, additional imaging modalities like CT scans or MRI may be recommended for more detailed evaluation of soft tissues or specific structures within the foot.

In foot X-rays, various views or projections are used to visualize different aspects of the foot's anatomy and detect specific injuries or conditions. The choice of view depends on the suspected problem and the information needed for an accurate diagnosis. Some common types of foot X-ray views include:

1) Anteroposterior (AP) View:-

In the AP view, the X-ray beam is directed from the front (anterior) to the back (posterior) of the foot. This view provides a standard frontal image of the foot, allowing assessment of the alignment of the metatarsals, phalanges, and tarsal bones.

2) Lateral View:-

The lateral view is obtained by positioning the foot sideways, and the X-ray beam is directed from the side. This view provides a profile or side view of the foot, making it useful for evaluating the alignment of the bones and identifying fractures or deformities.

3) Oblique View:-

An oblique view is taken at an angle to the foot, often at about 45 degrees. This view can help visualize specific structures, such as the tarsal bones, that may be obscured in the standard AP or lateral views.

4) Weight-Bearing View:-

In this view, the patient stands on both feet while the X-ray is taken. Weight-bearing X-rays can reveal changes in the alignment of the foot's bones and joints under the stress of standing. They are commonly used to assess conditions like flat feet and arch deformities.

5) Mortise View:-

The mortise view is a specialized view used to assess the alignment of the ankle joint, particularly when there is a concern about ankle injuries. It involves positioning the foot and leg to visualize the tibia, fibula, and talus bones and their relationship.

University Library Reference-

- The Physics Of Radiology and Imaging by K. THAYALAN
- Textbook of Radiology for Residents and Technicians by S. K. BHARGAVA
- Suggestions to secure good marks to answer in exam-
 - Explain answer with key point of the answers

Questions to check understanding level of students-

- WRITE THE DIFFERENT VIEWS OF THE FOOT X-RAYS?
- WHAT IS WEIGHT BEARING VIEW IN TERM OF FOOT XRAY ?
- Next Topic- **SKULL X-RAY.**

National song' Vande Mataram'.