

جامعة الإمام عبد الرحمن بن فيصل IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY

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X-Ray



What is X-ray?

It was discovered in 1895 by the scientist William Roentgen, and it was called x-ray because of the unknown (x) at the beginning of its discovery. It is a type of electromagnetic wave of high energy enables crossing through the bodies, especially the human body. X-rays are invisible rays we do not feel when they pass through the body, and it is a type of medical examination aims to image most of the bones and also the internal parts of the body quickly with no Pain or surgical intervention.

Where the body tissues are penetrated by x-rays, an absorption occurs according to the density of the tissues which is the reason for the difference in the color of the final image. The dense tissues such as bones and minerals absorb the rays intensively and appear white, and the air or gases appear in black and the rest of the body tissues of fat and muscles appear in different scales of gray according to its density.

Are X-rays safe?

The amount of the rays the patient is exposed to it while using this type of medical radiation is a little amount. It is possible harm or risk is too little that we can't compare it to several benefits of radiological tests. The radiologists are also keen to expose the patient to a minimum possible dose of radiation. They are committed to the required precautions during the test. There is no designated times for the patient to run radiological tests if his/her case requires performing many tests because the advantages are more than the probable harm.



When to run the test?

 General injuries for diagnosis of bones and fractures.



• For cases of rheumatism diagnosis.





 Spine problems, such as spinal slippage, and vertebrae structure defects like hunches and curves.



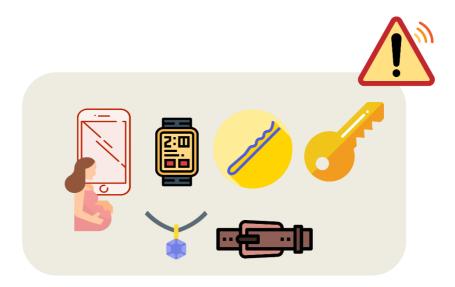




Foreign bodies, in case if swallowed by children accidently.

How to stand by for the test?

- Put off all jewelries and metal accessories from the part subject to imaging.
- Tell the physician or the radiologist in case of pregnancy or pregnancy possibility.
- Comply with the instructions of the radiologist.



What are the basics for protection against radiation?

 The radiologist must choose the minimum radiation dose possible for producing an image of high quality.



- Put on lead protector but it should not cover the part required for the exam.
- Avoiding repetition of radiation tests except in case of necessity per the advice of the physician and according to the patient case.



Audit & Review:

This brochure content was reviewed by radiology department of KFHU.



Health Awareness Unit



