What you need to know about...

Radiography of the Spine

An x-ray examination of the spine may focus on the bones in the neck, upper back, lower back or tailbone, or a combination of these areas. Spine x-rays usually are requested because a patient has suffered a back injury or is experiencing back pain. The radiographs can reveal injuries, fractures and evidence of arthritis.

Patient Preparation

Before your examination, a radiographer will explain the procedure to you and answer any questions you might have. A radiographer, also known as a radiologic technologist, is a skilled medical professional who has received specialized education in the areas of radiation protection, patient care, radiation exposure, radiographic positioning and radiographic procedures. As part of his or her duties, the radiographer will determine the amount of radiation necessary to produce a diagnostically useful image.

The radiographer will ask you to put on a hospital gown. If the examination is of your neck or upper back, you also will have to remove any earrings, barrettes or hairpins. Metal can interfere with the interpretation of the x-ray image.

If you are a woman of childbearing age, the radiographer will ask if there is any possibility you are pregnant. It is important that you tell the radiographer the date of your last menstrual period and whether there is a chance that you may be pregnant.



During the Examination

X-ray examination of the spine usually takes less than 30 minutes. Radiographs of the neck may be taken while the patient is standing, sitting or lying down. In some cases, the patient is asked to hold a sandbag or some other type of weight that pulls the shoulders down so the lower vertebrae can be better visualized. The radiographer may ask you to move your arms in various positions so that different radiographic views can be obtained.

Radiographs of the upper back and lower back usually are taken with the patient lying down on the x-ray table, although they sometimes are taken with the patient standing. Sponges may be placed around you to keep you in posi-

tion. It is important not to move during the exposure, because any movement will blur the image. The radiographer will ask you to turn in various positions so that different radiographic views can be obtained. If you are not able to move your body into a requested position, let the radiographer know. His or her job is to give you the best care possible while making you comfortable.

A lead-equivalent rubberized shield might be used to cover your reproductive organs, unless its use would interfere with the examination. Sometimes the area that needs to be examined would be hidden if a shield were used.

Once the examination is complete, the radiographer will determine whether the images are technically acceptable. The images then will be given to a radiologist,

a physician who specializes in the diagnostic interpretation of medical images.

Postexamination Information

After your radiographs have been reviewed by a radiologist, your personal physician will receive a report of the findings. Your physician then will advise you of the results and discuss what further procedures, if any, are needed.

The radiation that you are exposed to during this examination, like the radiation produced during any other x-ray procedure, passes through you immediately. If you have questions about the radiation associated with your exam, contact your physician. •

This patient education page provides general information concerning the radiologic sciences. The ASRT suggests that you consult your physician for specific information concerning your imaging exam and medical condition. Health care professionals may reproduce these pages for noncommercial educational purposes. Reproduction for other reasons is subject to ASRT approval.

