Pregnancy and Diagnostic X-ray/CT Safety

Are you pregnant or is there a chance that you might be pregnant? This may seem like a personal question, but if you are a woman of child-bearing age, it's one of the things the radiologic technologist will ask before performing an diagnostic x-ray or CT examination. Radiologic technologists are skilled medical professionals who have received specialized education in the areas of radiation protection, patient care and radiation safety. Their job is to produce the best quality diagnostic image while minimizing your exposure to the x-rays. This is of particular concern if you are pregnant or if you might be pregnant.

Why Is This Question Important?

Because the cells of the developing baby are rapidly dividing and growing into specialized organs and tissue, the unborn child is more sensitive to the effects of radiation exposure than an adult. The same is true for other things such as alcohol, certain drugs and infection.

Many diagnostic x-ray or CT examinations, such as imaging the arms, legs, head and chest, don't involve exposing your reproductive organs or unborn baby to the direct x-ray beam. In these cases, lead shielding can be used to block any scattered radiation.

Diagnostic X-ray or CT examinations of your abdominal area, such as the stomach, lower back, pelvis and kidneys, are more of a concern because they expose the developing fetus to the direct x-ray beam.

Scientists disagree about the exact amount of risk to the unborn child from the radiation used in x-ray examinations, but it's believed to be small. Yet, even small risks should not be taken if they're unnecessary.

The benefits of diagnostic x-ray exams often outweigh the risks. In some cases, the risk of not having the information provided by the exam may be greater than the risk from the radiation.

Protecting Yourself and Your Unborn Child

Once you let the radiologic technologist know whether you are pregnant or you might be pregnant, several different things may happen. For example, if you have been trying to get pregnant or you have any symptoms of pregnancy such as nausea, vomiting or breast tenderness, the exam may be delayed until a pregnancy test is performed. The technologist may ask you the date of your last regular menstrual period.

If you are pregnant and scheduled to have an examination that does not involve the abdominal area, the radiologic technologist will use lead shielding to protect your reproductive organs and the developing baby.

If you are pregnant and must have an abdominal-area x-ray exam, your procedure may be delayed while the radiologist consults with the physician who ordered the exam. Radiologists are physicians who specialize in the interpretation of medical images, and along with radiologic technologists, they make sure that the procedure is necessary and is performed properly.

Don't be alarmed if you had an x-ray examination before you knew you were pregnant. Remember that the risk is considered very small. However, if you are worried about the radiation exposure your baby may have received, you can discuss your concerns with your physician.

Sometimes a mother is asked to hold her child during an x-ray examination. If you are pregnant or if there is the possibility that you are pregnant, another person should take your place. Even if you are not pregnant, you should ask for a lead apron to protect your reproductive organs during the procedure.

Remember that radiologic technologists are committed to safety and quality patient care. If you have concerns about pregnancy and radiation safety, ask a radiologic technologist before your examination.