Patient Information

Risks of having X-rays and CT scans during pregnancy

Introduction

You may have concerns about the risk to you and your unborn child about having X-rays or CT scans during your pregnancy. The information in this leaflet answers some of the commonly asked questions allowing you to make an informed decision.

If you have any further questions, please ask a member of the team caring for you.

Can I have an X-ray or CT scan during pregnancy?

There is always concern about the potential harm to an unborn child from X-ray or CT scan radiation. Sometimes, due to a particular medical concern, your doctor may feel that an X-ray is needed. The decision is carefully taken based on the balance of the risks of the X-ray/CT scan and the benefit of the information gained.

What are the risks?

The risks to you and your unborn child are very small. The risk of not having the X-ray could be much greater than the risk of the radiation.

Birth defects, which are often believed to be one of the major concerns, only occur with much higher dose exposure in early pregnancy, for example, during the first 3 months.

The very small risk of low-dose radiation is childhood cancer.

Radiation

Everyone is exposed to low-dose radiation throughout their life. During pregnancy, a baby is exposed to normal low-dose environmental radiation. This can be from cosmic rays reaching the earth from space, certain rocks (which may be contained in building materials), travel (particularly air flight), and naturally occurring radon gas (particularly widespread in granite areas of the country such as Devon, Cornwall, and Dartmoor).

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In any one year our exposure will vary according to where we have lived, where we may have flown to and what we may have eaten.

The first detectable risk of cancer occurs when the baby is exposed to a dose 20 times more than the environmental radiation, such as from the sun. At this level of exposure your baby has a 1 in 500 chance of developing childhood cancer.

How many tests are safe?

The table below shows how many tests you would need to have for your baby to receive 20 times more than environmental radiation.

Type of X-ray or scan	Number of tests needed
X-ray of your chest	More than 50 tests
X-ray of an upper arm or hand (extremity)	More than 50 tests
X-ray of a lower leg or foot (extremity)	More than 50 tests
X-ray of your pelvis	Between 5 and 30 tests
X-ray of your lower spine	Between 3 and 20 tests
CT Scan of your head	Approximately 50 tests
CT Scan of your chest	Between 3 and 6 tests
CT Scan of your abdomen	Between 1 and 3 tests

All X-ray/CT scan examinations are only performed if the risk of not having the information they will provide is greater than the very small risk from the radiation. If you have any questions or concerns, please ask your doctor, or speak to the radiographer.

Further information

For more information, please discuss with the radiographer performing the X-ray or CT scan or the clinician who has requested the examination.

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Patient Information

Making a choice

Shared Decision Making

If you are asked to make a choice, you may have lots of questions that you want to ask. You may also want to talk over your options with your family or friends. It can help to write a list of the questions you want answered and take it to your appointment.

Ask 3 Questions

To begin with, try to make sure you get the answers to three key questions if you are asked to make a choice about your healthcare.

1. What are my options?
2. What are the pros and cons of each option for me?
3. How do I get support to help me make a decision that is right for me?

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https://aqua.nhs.uk/resources/shared-decision-making-case-studies/