Caring for a patient during an X-ray examination

Information for carers

This sheet aims to provide you with information about comforting a patient undergoing a radiography (X-ray) examination. If you have any other questions or concerns, please do not hesitate to speak to the team caring for them.

Your role

You will help the patient keep still during their imaging to avoid the need for repeat radiation exposures. Your presence will also help make the experience less stressful for them.

You have the right to refuse to be a carer following full explanation of the risk and benefit of the exposure. You should not be a carer if you are or think you might be pregnant.

You may be asked to stand behind a protective screen whilst the X-ray is taken, or you will be provided with a lead apron, which a member of staff will help you put on. This provides a protective layer of lead over the body in order to shield your organs from the radiation.

The procedure

The patient may be asked to lie on a table, sit on a chair, or stand with the X-ray equipment positioned around them. Most X-ray examinations are completed in just a couple of minutes. The patient will be asked to keep still whilst each X-ray exposure takes place. They may be repositioned in between exposures so more than one view of their body can be imaged.

Will I be exposed to radiation? What are the risks?

If you are standing next to the patient, you will be exposed to a very small amount of radiation scattered from their body. The lead apron will block most of this radiation.

Radiation exposure is measured in a unit called sieverts (Sv). The average exposure to radiation in the UK is 2.7 mSv per year (1 mSv = 0.001 Sv). We are all exposed to ‘background’ radiation from the earth, building materials, the food we eat, the air we breathe, and from outer space. For example, a one-way transatlantic flight can provide a radiation dose of about 0.08 mSv; approximately 11 days of the typical annual radiation dose. At these low doses, there is a very small increase in the risk of cancer occurring during your lifetime.

Wearing a lead apron and standing next to the patient, you are likely to receive a maximum dose of 0.01 mSv. This is around 2 days of background radiation, and corresponds to a negligible additional risk of developing cancer during your lifetime (Public Health England, 2011). Typical doses are even less than this.
For more information, please visit

- X-ray (www.nhs.uk)
- General imaging (www.kch.nhs.uk)
- Medical radiation: uses, dose measurements and safety advice (www.gov.uk)
- Ionising radiation: dose comparisons (www.gov.uk)

**Before the X-ray procedure**

If the patient is, or possibly may be pregnant, please ask them to tell the radiographer before they have the examination.

If they have had a previous reaction to X-ray contrast injections, please ask them to let the radiographer know.

**Useful contacts**

If you have any further questions, please ask a member of staff.

- Radiology main reception (telephone): 020 3299 3111
- General X-ray department (telephone): 020 3299 1525
- General X-ray department (email): kch-tr.xr_reception_dh@nhs.net

**PALS**

The Patient Advice and Liaison Service (PALS) is a service that offers support, information and assistance to patients, relatives and visitors. They can also provide help and advice if you have a concern or complaint that staff have not been able to resolve for you. They can also pass on praise or thanks to our teams.

PALS at King’s College Hospital, Denmark Hill, London SE5 9RS
Tel: 020 3299 3601
Email: kch-tr.palsdh@nhs.net

PALS at Princess Royal University Hospital, Farnborough Common, Orpington, Kent BR6 8ND
Tel: 01689 863252
Email: kch-tr.palspruh@nhs.net

If you would like the information in this leaflet in a different language or format, please contact our Communications and Interpreting telephone line on 020 3299 4826 or email kch-tr.accessibility@nhs.net

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