The patient is not always aware of the risk that a CT scan involves. Whereas CT is an extremely valuable tool in looking for illness and injury, it may involve larger radiation doses. For example, a CT scan of the abdomen or the lumbar spine is approximately equivalent to 3 years of exposure to natural radiation, i.e. an effective dose of 10 mSv. If the benefit for the diagnosis does not outweigh the radiation risk, it is not appropriate to expose the patient, especially a child or the fetus of a pregnant patient to such doses of radiation.

CT is one of the imaging techniques that delivers the largest quantity of ionising radiation.

Is my patient aware that a CT is not without risk?

Talk to your patients about it!
Patients are imaged with the most appropriate imaging equipment and technique.

Using MRI, ultrasound or sometimes no imaging at all instead of CT saves patient exposure to ionising radiation.

Appropriate use of CT is in the interest of the patient!

The benefits for the patients:

- Patients are imaged with the most appropriate imaging equipment and technique
- Using MRI, ultrasound or sometimes no imaging at all instead of CT saves patient exposure to ionising radiation

The appropriate use of imaging improves healthcare management for everyone: providing enhanced availability of equipment and control of costs.

How to talk about ionising radiation?

Exposure to X-rays can damage the cells in the human body and potentially increase the risk of developing cancer later in life. This risk is assumed to be proportional to the dose received and thus increases with the number of examinations performed. If a radiological procedure is indicated and is performed with the proper technique, the clinical benefits will outweigh the radiation risks. CT scans of the abdomen, the lumbar spine and the lungs deliver large amounts of radiation, and if a contrast agent is required, a further risk may be added due to possible adverse effects.

What is the risk for babies and young children?

The potential risk of cancer associated with exposure to ionising radiation is greater for babies and young children than for adults. Due to the fact that their organs are still developing and their longer lifespan, they are much more sensitive to radiation and require special attention.

2. For more information: https://www.who.int/ionizing_radiation/pub_meet/ct_children_leaflet.pdf

Talk to your patients about it!

www.herca.org