

SR1, Radiology Unit Standard Operating Procedures

1. Patient care
2. Radiation safety
3. Equipment maintenance
4. Diagnostic imaging workflows

1. Patient care

- Verification of identity,
- informed consent for contrast studies
- screening for pregnancy
- appropriate transportation (litter for critical patients)

a. Key aspects of patient management during a scanning (X ray, USG, CT)

-Positioning: patients are usually placed on their back (supine) or erect
Depending on the scan type, arms may be positioned at the sides or above the head. Straps and pillows may be used to help the patient maintain the correct position and stay still.

-Movement Restriction: Remaining completely still is crucial, as movement can blur the images especially for X ray and CT scan.

-Breathing Instructions: Patients may be instructed to hold their breath for a few seconds to avoid motion artifacts, particularly for chest or abdomen scans.

-Communication: Although the technologist is in a separate room, they can see, hear, and speak to the patient through an intercom system at all times.

b. Safety Precautions:

-Metal removal: Patient must remove metal objects like jewelry, hairpins, hearing aids, and glasses, as these can cause image artifacts

-Claustrophobia and Anxiety: Patients with severe anxiety or claustrophobia may be offered a sedative.

-Paediatrics: Parents may be allowed in the room with children, but must wear a lead apron.

2. Radiation safety

- Adherence to ALARA (As Low As Reasonably Achievable) principles
- Mandatory shielding

3. Equipment maintenance

- Regular quality assurance (QA) of X-ray equipment by a Radiation Safety Officer
- Mandatory dosimetry monitoring

4. Diagnostic imaging workflows

- Proper image acquisition (eg, “Rule of Two”),
- PACS utilization for storage
- Timely reporting
- Urgent reporting of critical findings

5. Infection control

- Sterilization of equipment
- Hand hygiene protocols

