

RADIATION THERAPIST'S ROLE IN THE CT SIMULATION ROOM

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Scanner Preparation



Warm-up the X-ray tube.

Begin a predefined protocol in terms of kilovoltage and milliamperage.

Carry out tests that relate to the quality of the images produced and their geometric characteristics.



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Verification of the Necessary Equipment



- Check the availability of the necessary equipment for nursing care.

- Prepare the devices for patient's immobilization depending on the localization to be treated.

- Prepare the localization equipment.



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Case Preparation



● Prepare the patient's medical file.

● Register the patient.

● Set up the appropriate immobilization devices on the scanner table.



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Patient Preparation



Call the patient and guide them to the locker room; observe safety measures.

Prepare the patient psychologically.

Mention that the procedure is painless and that the patient will be monitored and have the ability to communicate constantly.

For pelvic irradiation, home preparation is requested and explained by the doctor during the consultation. You must evaluate this preparation.

Ask the patient to undress and put on a gown to proceed to the next step.



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Setup and Immobilization



Once the patient is ready, help them to settle down on the table taking into account their physical capacities.

Align the patient properly with the appropriate immobilization devices.



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Simulation (1/2)



Move the scanner's table vertically and horizontally towards the gantry.

Acquire the scout view.

Ensure the perfect alignment of the patient; reposition if necessary and draw the midline.

Call the radiation oncologist.

Define the limits of the slices.



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Simulation (2/2)



Mark on the skin or the immobilization device the three reference points represented by the intersection of the lasers in front and on both sides.

Fix the lead balls on these marks.

Acquire the CT.

Take a photo of an unusual positioning, which will help to reproduce the position during treatment.

Once the scanner is done, return the table to its initial position. Remove the lead wires & balls, & tattoo the reference points with very fine disposable needles & ink.



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Patient Orientation



● Explain the hygiene rules to be followed.

● The patient should not apply anything on the skin. They should use Marseille soap to wash the irradiated area, wear cotton clothing, and avoid exposure to sunlight.

● Highlight that the position used during the simulation is to what patient will have to reproduce at each treatment session and that the immobilization devices will be the same

● Refer the patient to reception to get an identification photo and an appointment card for treatment sessions and follow-up consultations.



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Documentation



● Prepare the treatment sheet.

● Export the CT images to the treatment planning system.

● Send the patient's file to the physicists.



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