

Radiation Therapy using Cardiac Sparing For Treatment of Left Breast Cancer

Information for Staff

Why would Cardiac Sparing be requested?

Patients having radiation therapy to their left breast or chest wall often receive some dose to their heart. When patients take a deep breath in and hold it, the heart moves away from the path of the radiation beam. When patients hold their breath several times during radiation therapy treatment delivery, this can reduce the dose their heart receives.

How will patients be identified that require Cardiac Sparing?

The Radiation Oncologist (RO) can request Cardiac Sparing when they enter an order for radiation therapy. The RO may not know if the patient requires Cardiac Sparing until after their CT Simulation appointment.

If Cardiac Sparing is requested what happens next?

The patient will be booked for an education and coaching session with a radiation therapist prior to their CT Simulation appointment. The patient will practice holding their breath multiple times during this session. If the patient is able to reproducibly hold their breath, they will have their CT Simulation completed with breath hold.

Breath hold during CT Simulation and treatment may be completed without equipment (voluntary breath hold) or with special equipment (using the active breath coordinator device aka ABC) if the patient is not a candidate for voluntary breath hold.

If the patient is not eligible for either voluntary breath hold or ABC, they will have their CT Simulation, planning and treatment done while they are breathing normally.

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