

Body Fix-Immobilization Device

Policy:

To provide guidelines to ensure that the simulator technologist and therapists are knowledgeable of using immobilization and set-up devices with the aim to aid in the reproducibility of clinical procedures while delivery of IMRT treatment. The purpose is to assure and accurate, reliable mold of patient's position during their course of IMRT treatment. This will mainly be used during the radiation treatments of prostate, lung, and pancreas patients.

Procedures:

- A. CT setup
 - 1. Place indexing bars on table and record on patient simulation sheet
 - 2. Set up vacuum cushion to indexing bars
 - 3. Fasten fixation sheet on adhesive tape along side of cushion

- B. Patient setup
 - 1. Fasten vacuum manifold by placing tube into prepared sleeve of the fixation sheet
 - 2. Connect the vacuum supply to the manifold tube
 - 3. Place patient on top of vacuum cushion-heel placed 10cm from distal end of vacuum cushion
 - 4. Position vacuum manifold cushion over the patient
 - 5. Drape and attach the fixation sheet over the patient
 - 6. Attach fixation sheet to the adhesive tape that surrounds the vacuum cushion

- C. Creating patient's mold
 - 1. Air between patient vacuum cushion and sheet is evacuated
 - 2. Press the up button to pre-selected initial pressure of 60 millibars
 - 3. Press body fix start button to activate pressure

- D. Patient Molding
 - 1. Press fixation sheet against patient's body

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2. Pull on fixation sheet to get accurate patient's mold
 3. Connect vacuum pump to connecting tube of vacuum cushion
 4. Switch on to evacuate pump to 600millibars to create mold
- E. CT Scan
1. Scan patient
 2. Pull patient out of scanner
 3. Pull fixation sheet back and mark patient
- F. Cleaning of the Blue Bag System
1. Blue Bag
 - a. Clean daily after each treatment, and clean after patient has completed treatment cycle with hospital disinfectant, Virex 256
 - b. Manifold cushions are to be disposed of after patient completes course of treatment. In the event one gets severely contaminated during the treatment course, it will be disposed of and patient will be provided with new one.
 2. Vacuum Supply Pump (maintained by Biomed Dept.)
 - a. As needed- clean the housing of unit with soft, slightly moistened, lint free cloth
 - b. Every 3 months-clean air-intake filter of pump
 - c. Annually-clean and lubricate the casters of the unit using commercial engine oil
- G. Storage
1. Between treatments, blue bags will be stored on a shelving cart. Allow only one blue bag per shelf.
- H. Disposable components
1. Cover sheet and adhesive tape
 2. Hygienic Drape Manifold Tube
 3. Manifold cushion

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