

Radiation Safety Instructions - Sm-153

Samarium-153 EDTMP (Quadramet)

- Beta / Gamma Emitter
- Half Life: 1.93 days
- Beta range in tissue: < 1 cm
(External exposure minimal to others)
- Principle Gamma: 103 keV 28% abundance
(External exposure rate is ~30% of Tc-99m per mCi)
- Approximately 50% eliminated via urine in first six(6) hours
(Remaining dosage in bone)
- “Universal Precautions” will afford proper protection

IN-PATIENT PROCEDURE

1. The patient shall be assigned to a private room.
2. The patient shall remain in the room for the duration of the therapy (12-24 hr).
3. Biological samples (blood, urine, etc.) shall not be taken.
4. Disposable glove shall be worn when handling items potentially contaminated by the patient’s blood or excretions. always wash hands after removing gloves.
5. Used disposable gloves and potentially contaminated items shall be saved in the patient’s room in double plastic bags for monitoring and if necessary, disposal by Nuclear Medicine.
6. Housekeeping may clean the room. However trash and soiled linen shall not be removed from the room until surveyed by Nuclear Medicine.
7. Visitors are allowed in accordance with hospital rules. However, if the patient is incontinent of urine, visitors should not be allowed because of the potential for contamination spread.
8. In the event of a urine spill, don protective garments (i.e. disposable apron, gloves & booties) to provide patient care. Cover the spill with absorbent pads and then ½ “ of soft material (i.e. folded blanket). Be careful not to spread the spill. Have the patient wait in a non-involved area of the room. Remove protective garments at the door in the room. Prevent entry to the room.
Call Nuclear Medicine
9. In the event of an emergency surgery or death, notify Nuclear Medicine prior to transfer of the patient from the room. Nuclear Medicine will notify the Radiation Safety Officer (RSO). Because of the minimal external exposure rates expected, time restrictions & personnel monitoring is NOT required. As an extra precaution, pregnant personnel should not provide routine nursing care or handle a spill, if possible.