

HACKENSACK UNIVERSITY MEDICAL CENTER
DEPARTMENTAL MANUAL

NUCLEAR MEDICINE DEPARTMENT

PROCEDURES FOR IODINE 131
THERAPY TREATMENTS > 30mCi

POLICY:

Any patient that must receive a therapeutic dose of Iodine 131 > 30mCi must be treated on an inpatient basis. The patient can not be released until their exposure rate falls below 5mR/hr @ 1 meter or the activity drops below 30mCi. Personnel caring for patients treated with therapeutic doses of Iodine-131 > 30mCi will be informed about radiation hazards. Their exposure as well as the exposure of other patients in the vicinity will be kept ALARA.

PROCEDURE:

1. See that the patient is placed in a PRIVATE room with a toilet, at the end of a corridor whenever possible. The patient shall be confined to the room.
2. Use leak proof absorbent paper to cover large surfaces that are likely to be contaminated such as chairs, and the floor around the toilet. Small items such as telephones, door knobs, bed remote control, television control, and the nurses call cord should be covered with plastic.
3. Additional disposable gloves, absorbent paper, radioactive waste labels, and red bags shall be stocked in close proximity to the room for use by nursing and radiation safety personnel.
4. The nurses caring for the patient shall be provided with film badges. At no time are badges to be exchanged between nursing personnel. Each individual should write their name and SS# onto their badge for identification and also enter this information on the record sheet provided. The head nurse should check that this is completed.
5. Nurses instructions are in the policy manual and they should be aware of the contents.
6. The Radiation Safety Officer or other qualified staff member shall put a Radioactive Material sign on the door of the patient's room.
7. At time of administration of the isotope, Radiation Safety Officer or other qualified staff member shall attach a radioactive materials tag to the patients bedside indicating the type of isotope, the amount and the date of administration written. He/she shall also attach a tag with

the same information to the patient's chart.

8. Radiation Safety Officer or other qualified staff member shall carry out a radiation survey of the area surrounding the patient's room. No unrestricted area shall have radiation levels in excess of two millirems per hour. Exposure rates shall be measured at the patient's bedside, the surface of the patient, one meter distant from the patient, and the entrance to the room.
9. Brief the patient on radiation safety procedures and visitor control.
10. Thyroid burden of all personnel involved in administration of therapeutic dose of I-131 > 30mCi will be measured and a record will be maintained.
11. A plastic red bag shall be kept in the room for all disposable items such as plates, eating utensils, cups, napkins, tissues, bandages or dressings, etc. This material shall be periodically collected and monitored by the Radiation Safety Officer or other qualified staff member and be stored in a low level radioactive waste facility located on the hospital premises.
12. Non-disposable items such as linens, hospital gowns, etc., shall be stored in a separate plastic linen bag. These items shall be checked and monitored periodically by the Radiation Safety Officer or other qualified staff member and held for decay in the same area as stated in the previous step.
13. The patient may use toilet as usual but must flush three times.
14. As the therapy proceeds, pick up waste for transfer to decay in storage.
15. Following the dose administration measure the dose rate at bedside, at 1 meter from the bedside, at the visitors safe line shall be measured and recorded.
16. Radiation Safety Officer or other qualified staff member shall discuss appropriate precautions with patient and family before discharge. Do not release any patient until their exposure rate is less than 5mR per hour at 1 meter or the retained activity is less than 30mCi.
17. No pregnant woman shall be in the same room with the patient under treatment until okayed by the Radiation Safety Officer. The patient may have visitors above the age of 18 years but they must stay in the designated safe zone.
18. If the patient vomits within 24 hours after receiving the

radionuclide treatment the following steps must be taken :

- a. Radiation Safety Officer shall be notified immediately.
 - b. Vomitus and other contaminated material shall be handled as radioactive material and proper precautions shall be taken.
19. When the patient is discharged the Radiation Safety Officer or other qualified staff member shall:
- a. Survey room before releasing it for clean-up and a new admission. Decontaminate if necessary.
 - b. Collect the nurses film badges.
 - c. Remove the signs from the door.
20. If patient dies while containing the radioactive material, the Radiation Safety Officer shall be consulted on instructions for the funeral director or pathologist.
21. All the records will be maintained on file for at least three years.

Hackensack University Medical Center
Department of Nuclear Medicine
Measurement of Thyroid Burden

Date : _____

Instrument Used : Capintec / Canberra MCA System
Model TUS 100, Thyroid Uptake Probe

Background : _____cpm

Simulated Source in Thyroid Phantom : _____ cpm

Source Activity : 1.84 μ Ci on 8/7/78

Source Activity : _____ μ Ci on _____

Name(Print)	Net Thyroid Count (cpm)	Thyroid Burden (μ Ci)

Thyroid burden must be less than 0.04 μ Ci. Otherwise inform the
Radiation Safety Officer immediately.

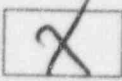
Measurement performed by : _____

Reviewed by : _____
Radiation Safety Officer

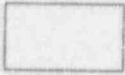
DEPARTMENT OF RADIOLOGY

ANNUAL POLICY/PROCEDURE REVIEW & APPROVAL RECORD

The POLICY/PROCEDURES for
were reviewed during the month of August , 1996.



REVISED AS INDICATED



NO REVISIONS NECESSARY

SIGNED:
TITLE:

Harry Gross Jr.
(DIRECTOR)

SIGNED:
TITLE:

John Herdrip + Eric John Weiss
(RADIATION SAFETY OFFICER)

SIGNED:
TITLE:

Helen Chinn
(ADMINISTRATOR)

SIGNED:
TITLE:

Michael Petrenko
(CHIEF TECHNOLOGIST)

Hackensack University Medical Center
30 Prospect Avenue, Hackensack
New Jersey 07601

Date : 3/11/97

An inservice education lecture was presented on the following subject matter

To pay extra attention to the Pumaalarm/Alert
Radiation Oncology

The duration of the inservice was : 10 minutes

Attendance included the following personnel :

- | | |
|--------------------------------|----------------------------------|
| 1. <u>Green m Gallagher</u> | 2. <u>m J BRT</u> |
| 3. <u>George Beninatti BRT</u> | 4. <u>Christine M Schlecker</u> |
| 5. <u>Michael Summa BRT</u> | 6. <u>Deena P. Kephart</u> |
| 7. <u>Mary Lou Masone</u> | 8. <u>Debra Devola</u> |
| 9. <u>Raissa Sykes</u> | 10. <u>Boone R. Roddy</u> |
| 11. <u>J. W. Sykes</u> | 12. <u>Patricia B. Dandridge</u> |
| 13. <u>Natant Reed BTR(X)</u> | 14. <u>Phil C. Reed</u> |
| 15. <u>Kathleen Kelleher</u> | 16. <u>Margaret Strozza</u> |
| 17. _____ | 18. _____ |
| 19. _____ | 20. _____ |
| 21. _____ | 22. _____ |
| 23. _____ | 24. _____ |

The inservice was presented by :

Laszlo Berkovits

Laszlo Berkovits, M.S., D.A.B.R.
Associate Medical Physicist
Assistant Radiation Safety Officer