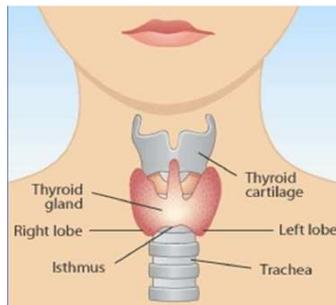


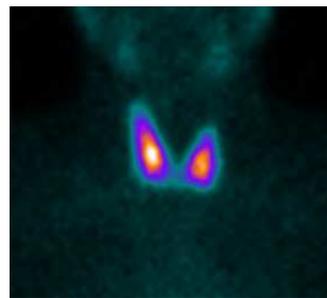
## INFORMATION ON RADIO IODINE I-131 THERAPY

### Purpose of I-131 therapy:

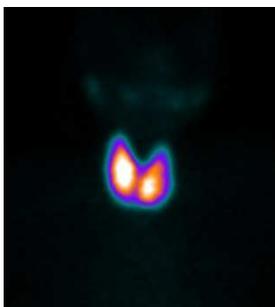
For a healthy life, one needs the right level of circulating thyroid hormones produced by the thyroid gland. When there is excessive thyroid hormones circulating in the body due to erratic functioning of Thyroid gland, the condition is referred to as 'Hyperthyroidism'. This can be caused by Graves' disease, in which the entire thyroid gland is overactive, or by some part of the thyroid gland usually a nodule/s which are locally overactive and produce too much thyroid hormone. A treating physician may often decide that it is better to destroy the functioning cells within the thyroid gland using Radioactive Iodine I-131.



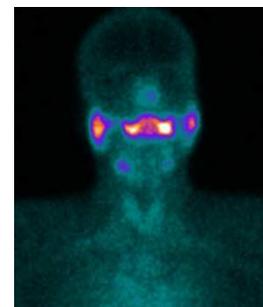
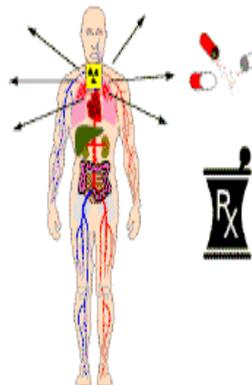
Normal Thyroid Gland



Normal Thyroid Scan



Overfunctioning Thyroid Gland



After I-131 treatment

### How is the treatment given?

Radio-iodine Treatment for hyperthyroidism is done on **outpatient basis**. This involves oral administration of a single dose of the radioactive medicine in one or two capsules.

You should not eat or drink 2 hrs prior to taking capsule on the day of the procedure.

If you have been taking anti-thyroid medications, it may be preferable that you stop the anti-thyroid drugs for five to seven days before this treatment. *This is to be decided only on the advice of your Doctor or the Nuclear Physician.*

Radioactive iodine treatment is given only as per prior appointments with necessary preparations and protocol so as to avoid unnecessary radiation exposure to staff, other patients, your family and others (public).

To ensure good uptake of the medicine by the thyroid gland, it may be required that some patients may need to be prepared with restriction in dietary intake of stable iodine for few

weeks. Occasionally patients may need an intramuscular injection of Rh-TSH also to stimulate the uptake of the medicine by the thyroid gland.

After ingestion of I-131, it is quickly absorbed from the stomach into the bloodstream and then concentrated by the thyroid gland. I-131 localized within thyroid gland emits lethal radiation for few mm distance only thus leading to destruction of the gland's cells over few weeks upto 2 months. However, the radiation as such fades away fast within few days.

### **Informed consent:**

Patient will be asked to sign an informed consent form since this treatment is intended to make the patient lose his or her thyroid gland.

### **Radiation Safety Instructions:**

The following guidelines will help to minimise unnecessary radiation exposure:

Drink plenty of fluids (to get rid of circulating iodine from the system through urine)

Use disposable eating utensils or wash your utensils separately from others.

Use private toilet facilities, if possible, and flush twice after each use.

Bathe daily and wash hands frequently.

Do not prepare food for others that requires prolonged handling with bare hands.

Sleep alone and avoid prolonged intimate contact for three days.

Avoid close proximity to pregnant women while moving in public area. Avoid contact or handling of infants and children for three days. Maintain prudent social distance from others for three days.

Launder your linens, towels, and clothes daily at home, separately for three days. No cleaning of the washing machine is required between loads.

### **Pregnancy and breast feeding?**

*This treatment is contraindicated in pregnant women. When in doubt, female patients may be advised pregnancy test before administering I -131.*

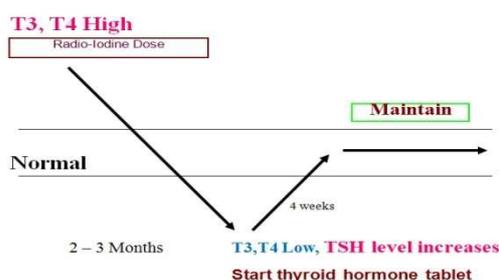
*This treatment is contraindicated in breast feeding mothers.* If treatment is indicated, then the patient will be advised to stop breast feeding before administering I-131.

### **Future Pregnancy?**

I-131 treatment as such does not affect the chances of further pregnancy but patient receiving this treatment should **avoid becoming pregnant for six months to one year after treatment.**

### **What is the effect of I-131 treatment on the body?**

Successful treatment with I-131 leads to loss of thyroid tissue. Since hormones produced by the thyroid are essential for metabolism, these **patients will need life long replacement medication.** Patients will be advised to have their blood tests by the end of 2 months to know the effect of the I-131 treatment and the right dose of thyroid hormone pills will be prescribed for the rest of their life. Thyroid pills are inexpensive, and patients will typically be instructed to take the dose orally once daily morning in empty stomach.



### **Caution:**

Failure to report back to the referring physician at 2 months and delay in checking the hormone status may result in clinically severe '*hypothyroid status*'. The importance of close follow up after treatment should be understood.