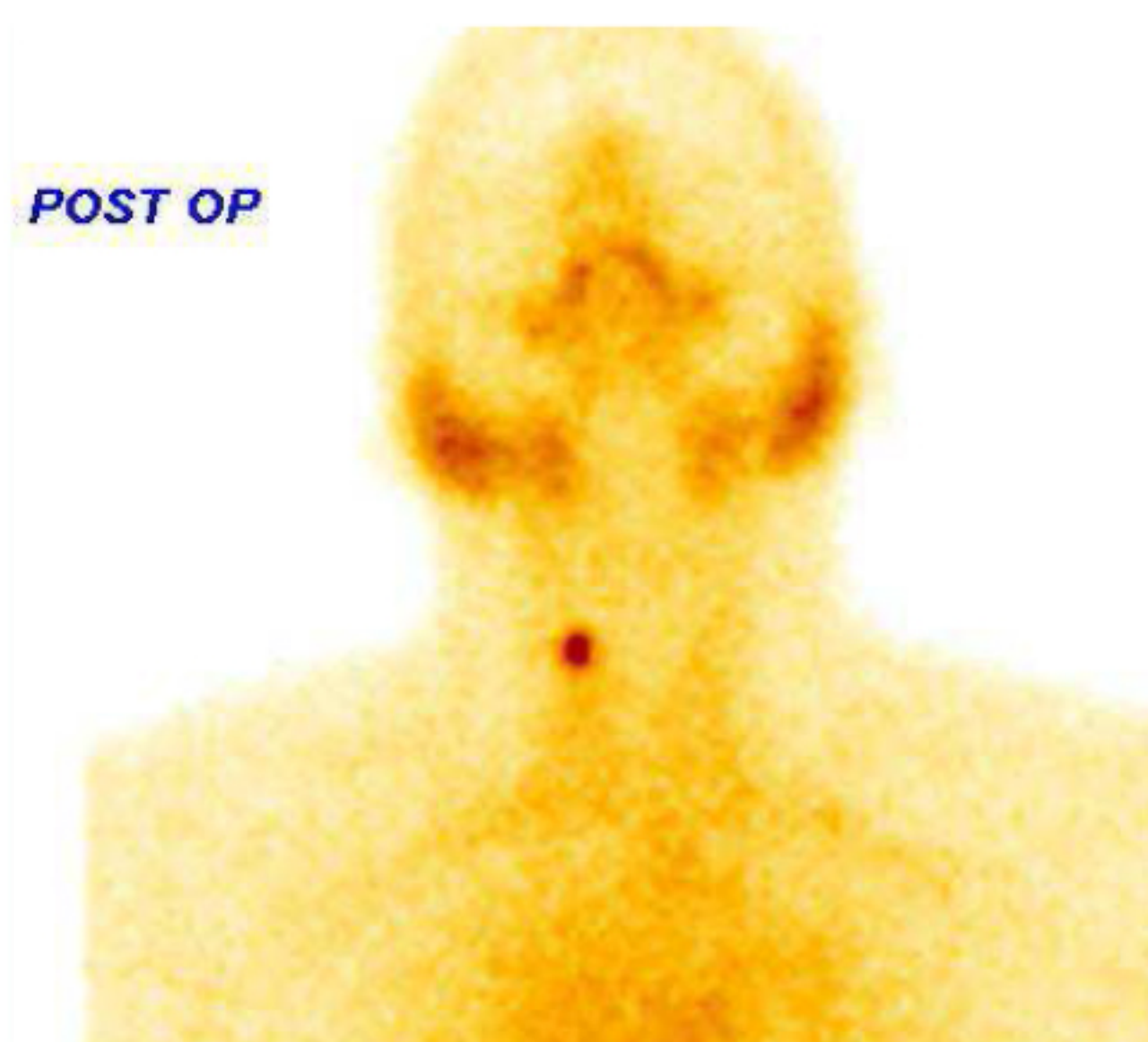


Patient Information Service
Radio-iodine Therapy after Surgery for Thyroid Cancer
Dr K Kumaresan

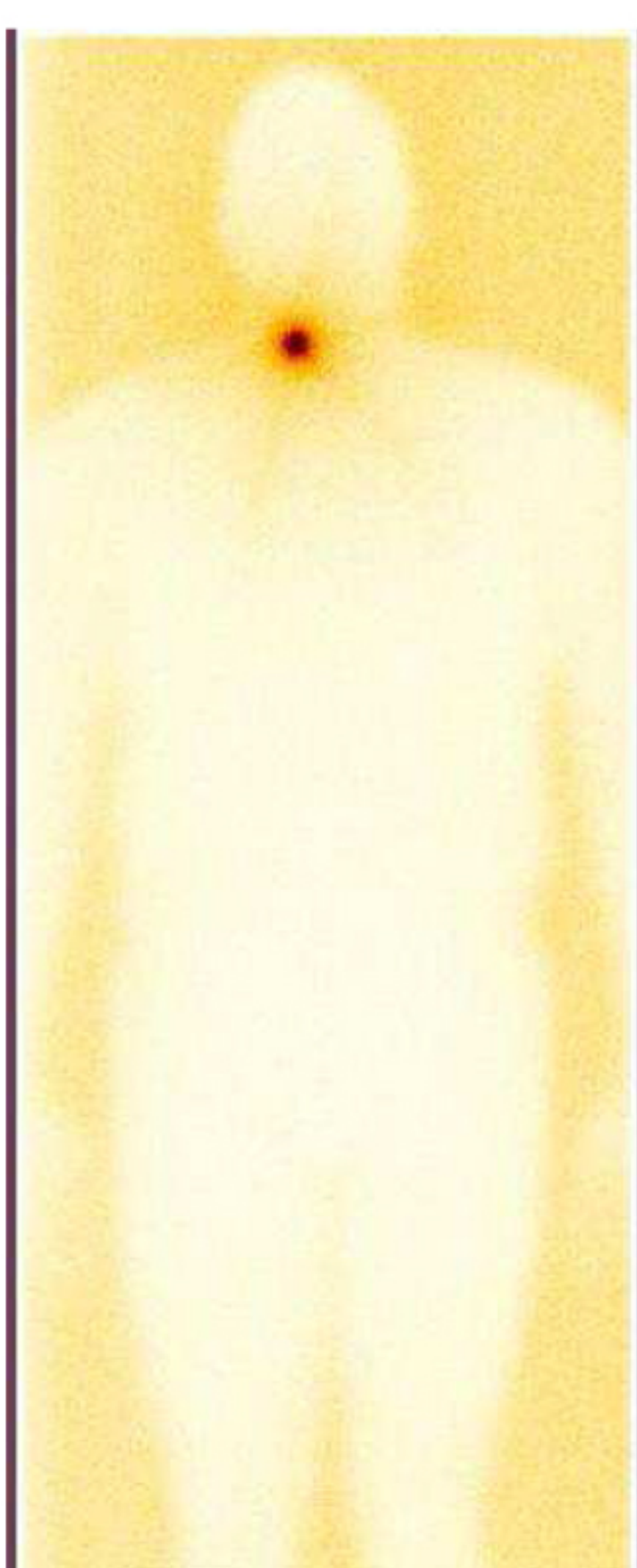
Thyroid cancer is suspected when patient presents with a swelling in the neck. Diagnosis is made based on clinical examination, scanning procedures and needle test.



It is possible that there may be no indication of cancer in any of the tests, but surgery has to be performed; quite often diagnosis of thyroid cancer is made only after surgical removal of the gland and biopsy examination of the tissue. Even after good surgery, a small bit of (most likely normal) thyroid tissue is expected to remain in the patient's neck which is invisible to the surgeon and cannot be seen in any other imaging test.

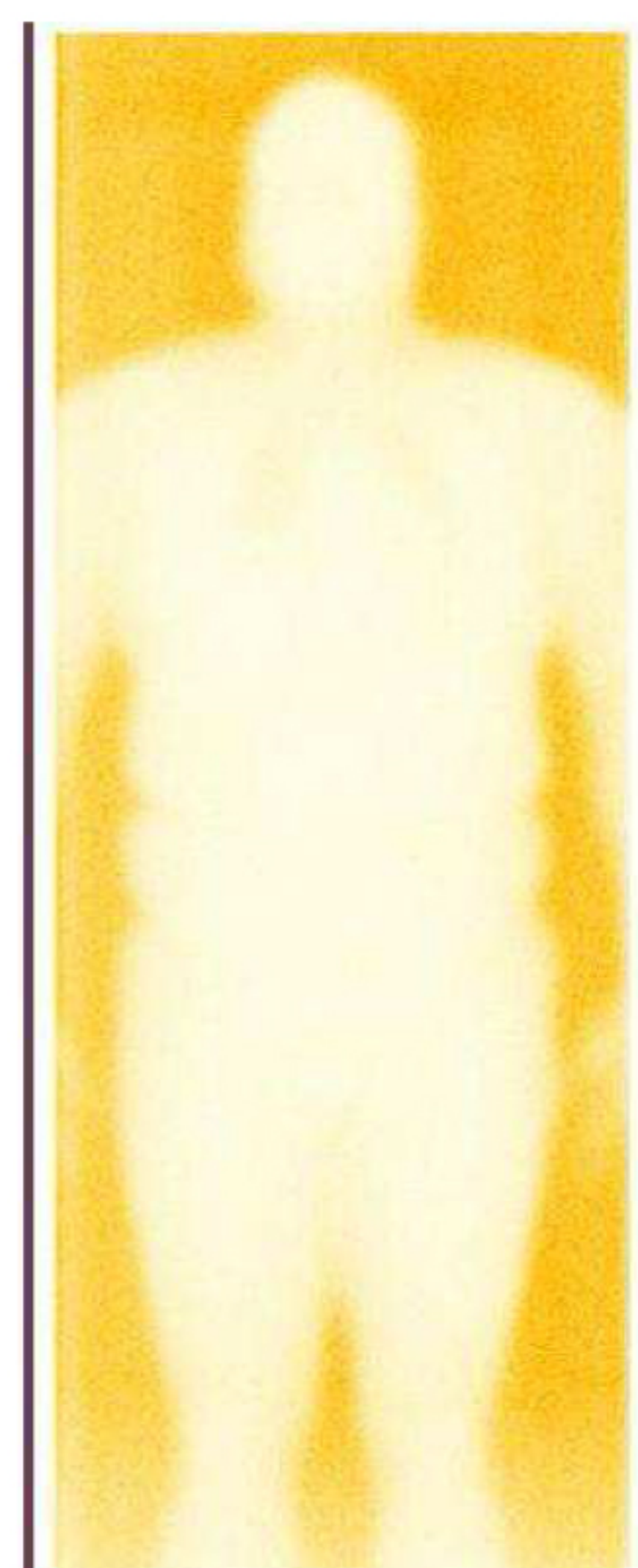


Invariably radio-iodine therapy is recommended to 'clean up' such remaining thyroid cells. Required dose of isotope of iodine I-131 can be administered to the patient orally in the form of capsule or liquid. (This medicine is just like the table salt we routinely use and has no serious side effects, like one might anticipate from other cancer drugs or external radiation). The isotope targets the specific tissue and whole body scan is done to know if there is any spread of thyroid cancer to other parts of the body like lungs or bones.



Iodine scan is repeated anytime after 3 months to know the outcome of the treatment.

Patients need to undergo regular check up with scan every year for first 3 years to look for any recurrence of disease.



Is admission into hospital required for Radio-iodine Therapy ?

Most of the patients who have undergone good surgery need only upto 30 mCi of I-131 which can be administered as outpatient and allowed to go home. Other patients who need higher dose of I-131 will need to be admitted into govt approved isolation room facility for one to two nights. There is no medical purpose for this isolation; it is required only to avoid unnecessary radiation exposure from the patient to others – like family and public.

Patient preparation

Treatment will be successful only if enough I-131 accumulates within the remaining thyroid tissue. To maximize the uptake of I-131 by the thyroid tissue, it should be stimulated with the help of patient's own 'Thyroid Stimulating Hormone' TSH from the pituitary gland which will be raised by 3 -4 weeks from the date of removal of thyroid gland.

Patient should not take Thyroid Hormone tablet (should be withdrawn for 4 weeks if already taking). If the treatment cannot be delayed for 4 weeks or if the patient cannot stop the tablet, then there is the option of using TSH injection to stimulate the uptake of isotope by the tissue.

Dietary restrictions: Stable iodine content in the patient's food can dilute the isotope medicine, reduce the uptake by the thyroid tissue and affect the outcome of the treatment. Hence iodine in the food stuff listed below need **to be avoided** by the patient for few weeks before the dose administration:

- Iodized salt ; *if non-iodized salt is not available one can remove the iodine from the salt powder by heating it on a pan (patient should not be in the kitchen where this is done so that he does not inhale the iodine vapour)*
- sea food - fish, prawns & crabs
- All kinds of Canned / packed food (– incl vegetables, fruits, meat & beverages)
- Any salty snacks such as nuts, chips, papad, pickles etc.
- Prepared or processed foods such as Chinese food
- Bakery items like pizza, burger, biscuits, chocolates etc.
- If the words "iodine", "iodate" and "iodide" appear in the list of ingredients, in any food or drug (like vitamin supplement).

iv Contrast injection given for CT scan has high content of iodine which can block our isotope for several months and hence treatment should be delayed further or Recombinant TSH inj should be used to overcome this problem.

Radiation Safety Instructions: 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.

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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.**

How to schedule the treatment?

Advance booking of isotope medicine is required since this cannot be stocked and is available only on weekly shipment. Even if the treatment is planned 4 weeks after surgery, it is important that patients consult the Nuclear Physician immediately after discharge.