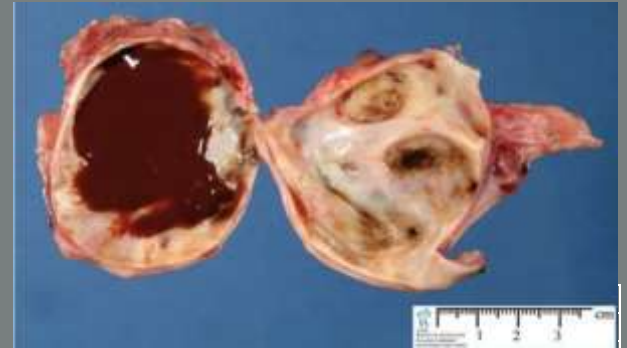


Whole Body Iodine Scan: Struma Ovarii



I-131 Thyroid Therapy



By: Allie Dixon

University of Oklahoma Health Sciences – Nuclear Medicine
Technology



Patient Information

Patient History :

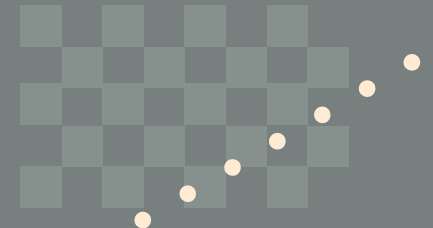
- 34-year-old female presents with chronic back pain and obesity. The patient also presents with hypothyroidism and prediabetes

Medical History:

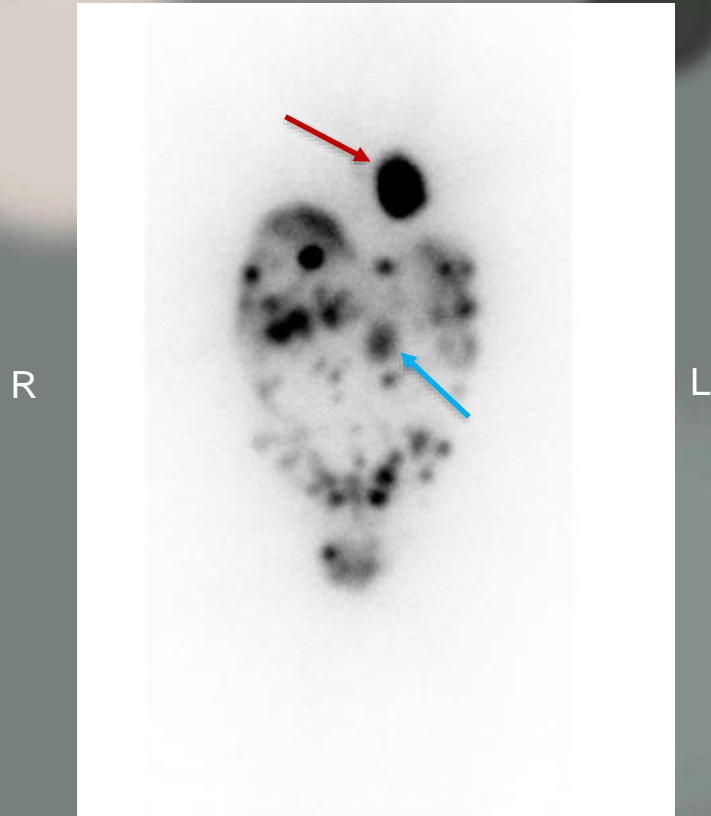
- 2010 – adnexal mass
- 2010 – Radical salpingo- oophorectomy
- 2011 - Left ovarian cystectomy revealed struma ovarii.
- 2020 - A total thyroidectomy
- 2021 - Iodine treatment #1 with subsequent imaging
- 2023 - Iodine treatment #2 with subsequent imaging

Reason for exam:

- Assess and treat Struma Ovarii



WBI Scan #1



I- 131 Thyroid Therapy #1

9 days post- administration

- Mediastinal mass
- The left retrocrural mass
- Scattered uptake throughout the diaphragm and abdomen

Radiopharmaceutical used: I-131 Sodium iodide

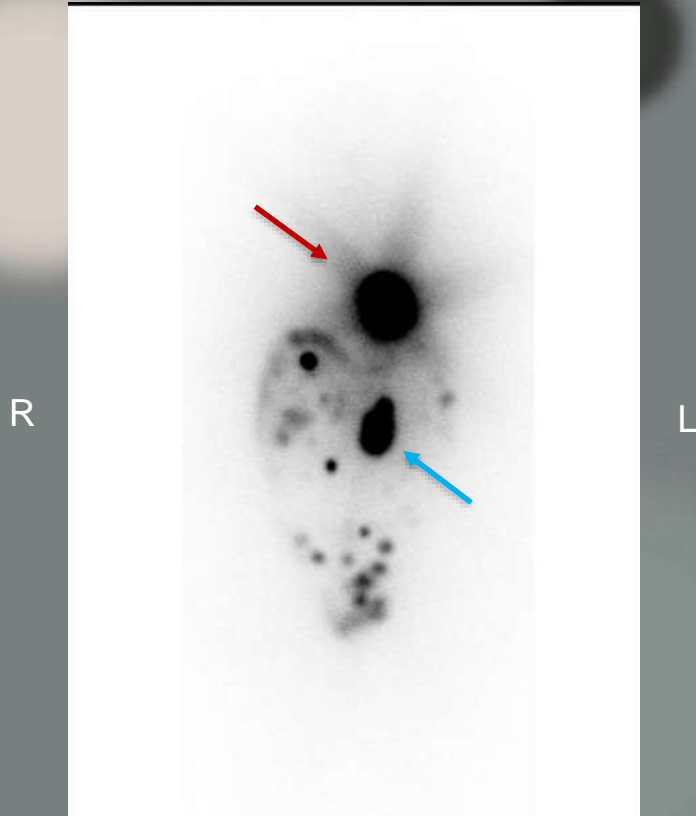
Amount given: first treatment: 80.8 mci (2989.6 Mbq)

second treatment: 102.7 mci (3799.9 Mbq)

Route of administration: oral capsule

Type of camera used: SPECT/CT

WBI Scan #2

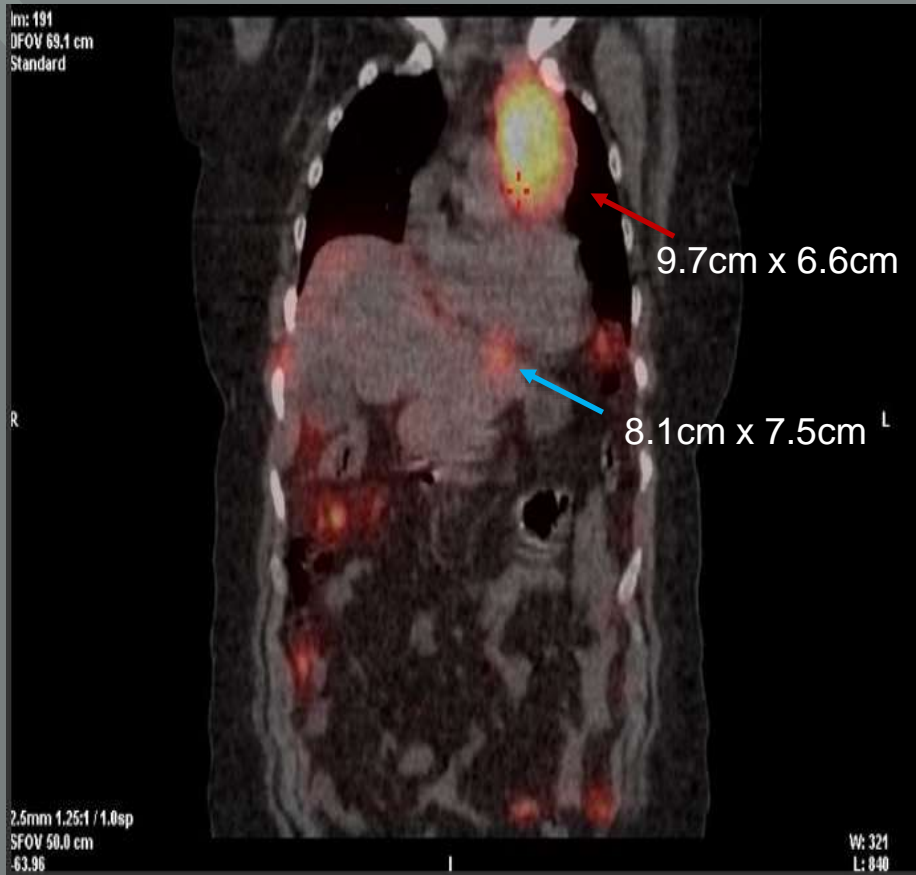


I- 131 Thyroid Therapy #2 7days post-administration

- Mediastinal mass
- The left retrocrural mass
- Scattered uptake throughout the diaphragm and abdomen

Radiopharmaceutical used: I-131 Sodium iodide
Amount given: second treatment: 102.7 mci (3799.9 Mbq)
Route of administration: oral capsule
Type of camera used: SPECT/CT

WBI Scan #1

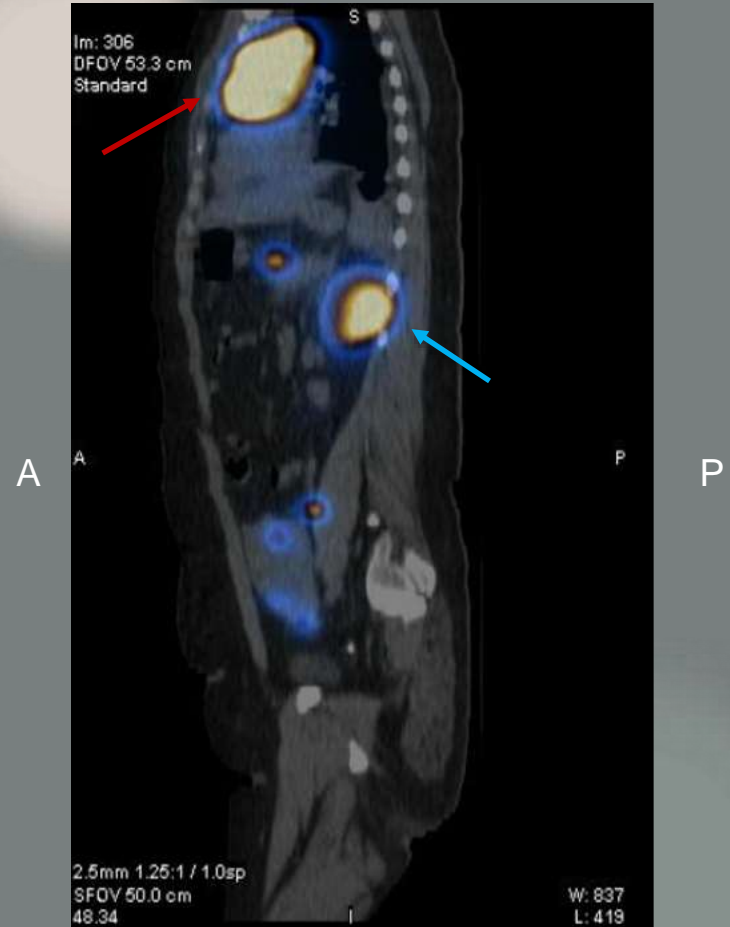


WBI Scan #2



Sagittal View

- Mediastinal mass (upper yellow area)
- The left retrocrural mass (middle yellow area)
- Scattered uptake throughout the diaphragm and abdomen



Teaching Points



What is Struma Ovarii?

- Specialized teratoma composed of mature thyroid tissue
- Must contain more than 50% thyroid tissue.

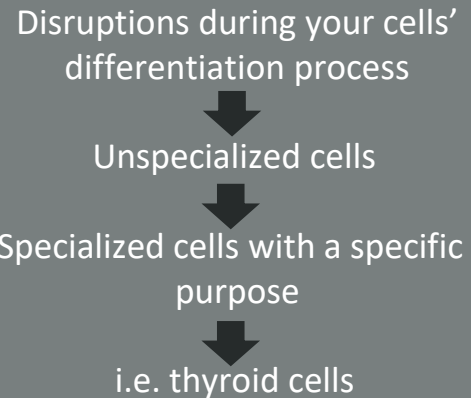


How does I-131 therapy help?

- Targets thyroid cells
- Becomes toxic to thyroid cell
- Cells to shrink and die.



How does thyroid tissue get to the ovaries?



Resources

Cancer Resources from OncoLink | Treatment, Research. “Radioactive Iodine (I-131) Therapy for Thyroid Cancer.” *OncoLink*,

www.oncolink.org/cancers/thyroid/treatments/radioactive-iodine-i-131-therapy-for-thyroid-cancer. Accessed 31 Jan. 2024.

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