

Differentiated thyroid carcinoma arising from or associated with struma ovarii: report of 2 cases

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OBJECTIVES

- Struma ovarii is a rare condition which elicited considerable interest because of its many unique features like its relationship to teratoma and differentiated thyroid cancer.
- The most common thyroid carcinomas to arise in struma ovarii are papillary and follicular.
- We describe two patients with differentiated thyroid carcinoma originating from malignant struma ovarii.

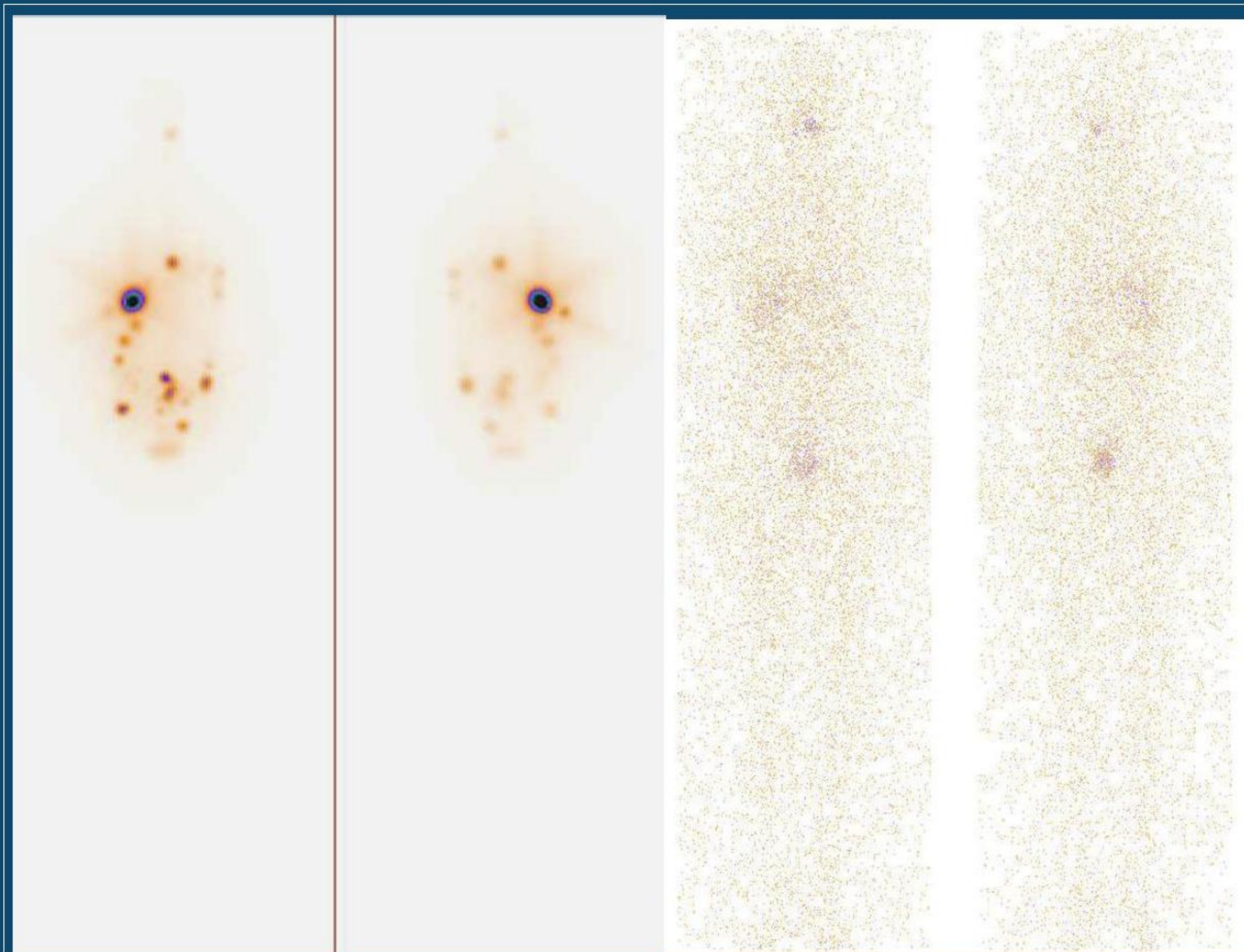
Patient 1

- 49 year old woman presenting with bone pain revealing follicular thyroid carcinoma metastases on biopsy
- Total thyroidectomy with lymphadenectomy revealed a follicular thyroid carcinoma with oxyphil component T3N1bM1.
- Two years later, ovariectomy revealed a malignant struma ovarii.
- Surgical resection of several vertebral metastases with spinal decompression and seriate adjuvant radioiodine therapy (10 GBq) were performed.
- WBS revealed high uptake on cervical lymph node and disseminated pulmonary and skeleton metastases justifying the pursue of radioiodine therapy.

Patient 2

WBS after first radioiodine therapy

WBS after second radioiodine therapy



- 32 year old woman
- Ovarian teratoma with :
 - well differentiated follicular variant of papillary thyroid carcinoma
 - peritoneal dissemination and appendix tumoral infiltration
 - Two years later total thyroidectomy was performed (Hystology revealed chronic thyroiditis without thyroid cancer)
- Whole body scintigraphy (WBS) with therapeutic activity of I-131 (2 sessions; cumulated activity: 11.1GBq) revealed initial disseminated pulmonary and bone metastases with a complete response after radioiodine therapy, in agreement with undetectable Tg.

Radioiodine (RI) treatment characteristics						
	I-131 (MBq)	Radioiodine	TSH (mU/L)	Tg (mg/dL)	ATG Ab	Whole body scan
Patient	Cumulated activity	Session No	Tumor markers and scan before the first radioiodine session			
Patient1	10000	3	75	>300	negative	Mediastinal and Ibilateral lung uptake, bon uptake on L1 bilateal femoral necks and trochanters
Patient 2	11100	2	100	>300	negative	Disseminated uptake within pulmonary areas and skeleton

CONCLUSIONS

Vascular invasion was not identified in any of the cases; however, disseminated metastases were identified. The treatment of choice for patients with thyroid carcinoma within ovarian malignant struma ovarii is local resection of the extra-ovarian tumor with subsequent thyroidectomy followed by radioactive iodine ablation.

REFERENCES

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