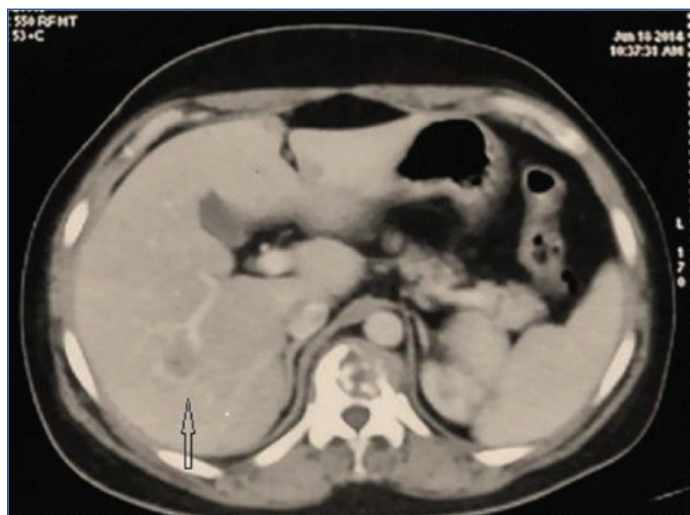


# Rare Metastases from a Papillary Thyroid Carcinoma

DEEPAK RATHINAM<sup>1</sup>, NAYHA HANDA<sup>2</sup>, MANISHA JANA<sup>3</sup>**Keywords:** Malignancy, Thyroglobulin, Thyroidectomy

A 34-year-old woman who had been operated for papillary thyroid carcinoma two years ago presented with complaining diffuse back pain. The patient had undergone a total thyroidectomy for a papillary thyroid cancer. The tumour measured 5 x 3 cm and was confined to the right lobe of the thyroid without extrathyroidal invasion or metastatic cervical nodes. The serum thyroglobulin, antithyroglobulin antibody levels and the radioactive iodine uptake were normal in the postoperative period. The present local physical examination revealed no neck mass and no significant cervical lymphadenopathy. Haematological and biochemical examinations, including thyroid function test and chest X-ray, did not reveal any abnormal findings. However, thyroglobulin levels were raised to 4 ng/ml.

An axial computed tomography was done to look for distant metastases. It revealed multiple hypodense lesions in the liver and lytic lesions in the dorsal vertebrae [Table/Fig-1]. An enhancing well defined mass was also noted in the right paraspinal muscle [Table/Fig-2]. Increased uptake of fluorine-18-fluorodeoxyglucose was seen



**[Table/Fig-1]:** Axial CECT image showing hypodense lesions in the segment 6 and 7 of the liver (arrow).

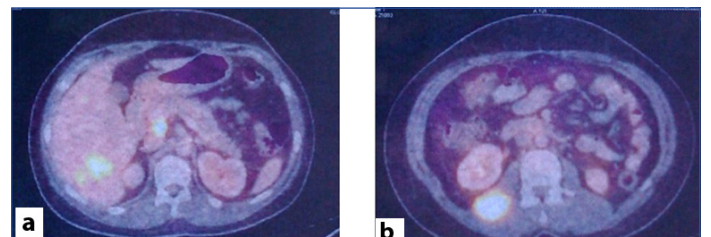
in all the lesions [Table/Fig-3a,b]. An ultrasound guided fine needle aspiration cytology of the right paraspinal muscle lesion was done which revealed a poorly differentiated tumour positive for thyroglobulin and negative for cytokeratin. In view of recurrence, the patient was treated with radioactive iodine ablation and is on follow up.

## DISCUSSION

Papillary thyroid carcinoma which usually metastasize to regional lymph nodes can have unusual metastatic presentations and patterns. Unusual sites of metastases of papillary thyroid carcinoma



**[Table/Fig-2]:** Axial CECT image showing an enhancing hyperdense mass in the right erector spinae muscle (arrow).



**[Table/Fig-3]:** 18F-FDG PET/CT image showing FDG uptake in the a) Liver and; b) Right erector spinae lesions.

include brain, eye, breast, liver, kidney, muscle and skin [1]. After the initial treatment, patients must be monitored regularly for recurrent disease utilizing clinical examination, thyroglobulin measurement and various imaging modalities [2,3].

## CONCLUSION

Papillary thyroid carcinoma can metastasize to unusual sites and this should be kept in mind during the follow up of these patients.

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