

A Rare Case Of Thyroid Follicular Cancer Presented With Isolated Spine Metastasis With Spinal Cord Compression

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INTRODUCTION:

Metastatic tumors are the most common tumors of the spine; however spinal cord compression as the first presentation of metastatic thyroid follicular cancer without thyroid enlargement is unusual and rare. Thyroid cancer accounts for about 1% of all new malignant disease and affects female more than male with the ratio of 3:1 and spine is the commonest bony metastatic site in thyroid carcinoma.

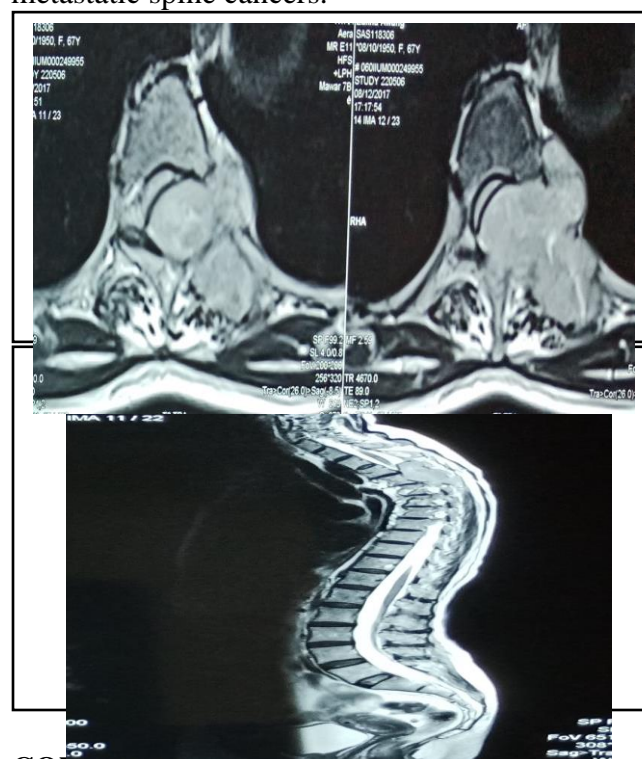
CASE REPORT:

Miss Z, a 67 years old lady with underlying hypertension presented with two months history of gradual lower limb weakness and numbness; two days history of bowel incontinence. She had no thyroid enlargement, no thyroid symptoms and normal thyroid biochemical profile and tumor markers. Her magnetic resonance imaging (MRI) of spine shows a lobulated solid mass compressing the spinal cord at T4 vertebra involving both the spinal and paraspinal areas. CT-guided biopsy of the spine shows follicular thyroid metastasis. She then underwent laminectomy of T3, T4 and T5 vertebra with cord decompression surgery. Post-surgery there is a recovery of lower limb neurology and bowel continence.

DISCUSSIONS:

Thyroid carcinoma generally responds well to treatment, and spinal metastasis is uncommon. The presence of distant metastasis from thyroid carcinoma decreases patient 10-year survival rate to 50%. The follicular type typically affects middle-aged females and 90% presents as a simple thyroid nodule. Only 5% presents firstly as distant metastasis, commonly to the bone, lungs and lymph nodes. Spinal metastasis more frequently occur in the thoracic spine (60-80%), followed by lumbar spine (15-30%) and cervical spine (<10%), usually either through Batson plexus, direct spread or local invasion. Thyroid

carcinoma has predilection for vertebral body and often presents as back pain as a result of vertebral collapsed due to pathological fracture; rarely with spinal cord compression as result of direct invasion. Prognosis of spine metastasis due to thyroid cancer is better compared to other metastatic spine cancers.



CONCLUSION:

Bone metastasis is frequent complication especially if it causes compression fracture with spinal cord compression and pain. With high index of clinical suspicion correlating with imaging, early diagnosis and treatment show good prognosis for patient with metastatic spinal cord compression.

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