

Case Blog

Title: Follicular Carcinoma of Thyroid with Bone Metastasis

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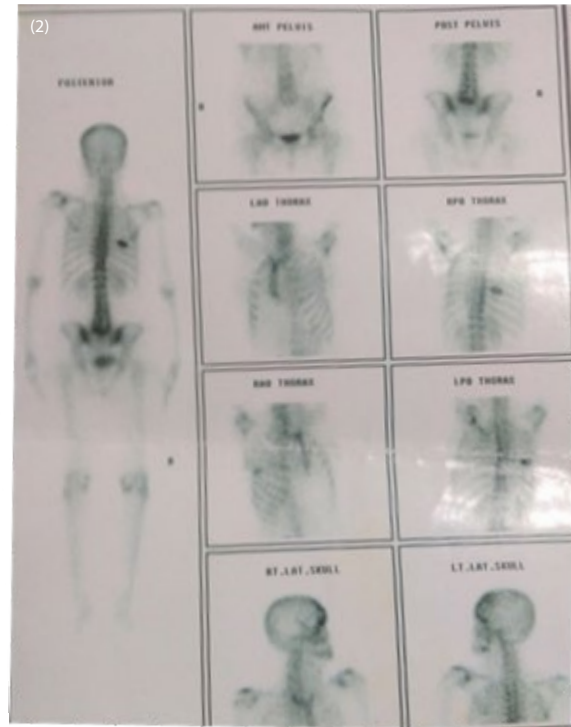


Figure 1: Huge mass in front of neck, cheek and forehead.
Figure 2: Bone scan showing sites of metastasis.

Introduction

Bone metastasis is said to be one of the commonest site for metastasis, among them the most common primary is from breast cancer, followed by lung, prostate. Thyroid carcinomas presenting with bone metastasis is very rare with frequency of about 2.5%. The most common subtype of thyroid cancer causing bone metastasis is follicular thyroid carcinoma. Here we are presenting a case of follicular carcinoma thyroid along with bone metastasis.

Case Blog

Sixty years old female patient presented to the ENT OPD with complaints of swelling in front of the neck for the past fifteen years (Figure 1). Swelling over cheek, parietal region for the past five years. The patient was investigated and general examination was done. FNAC from the thyroid mass was found to be follicular neoplasm. To confirm the diagnosis, biopsy was taken from the cheek swelling which revealed metastatic deposits from the follicular thyroid carcinoma. As there was extensive spread of the disease, the patient was planned for whole body bone scan, which revealed, multiple metastatic lesion involving the left fronto parietal region of the skull, photopic area over forehead, right 7th rib, left scapular spine, L5 and S1 segment of the lumbosacral spine (Figure 2).

As there was extensive bony spread, surgical excision was impossible in this tumour. The patient was referred to radiotherapy department for opinion. Then the patient was planned for palliative therapy. After making cytological diagnosis as metastasis from follicular carcinoma, the patient was started on palliation therapy and is being regularly followed up. After the tissue cytopathological confirmation, the patient has been followed up for two years.

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Discussion

Thyroid cancer is the most common endocrine malignancy. There are four major types of thyroid carcinoma among them papillary and follicular carcinoma together termed differentiated thyroid cancer is most common. In very less number of patients about 5-20% there are chances of bone metastasis. Among the types of thyroid cancers, anaplastic carcinoma has the worst prognosis.

Metastasis to bones from papillary thyroid carcinoma often involves ribs, vertebrae and sternum, but metastasis to skull bones is extremely rare. Metastasis to skull from thyroid cancer is mostly from the follicular thyroid carcinoma

Total excision of the tumour remains the main step in management, however in this case, it was impossible for complete resection of tumours as, patient presented in a very late stage.

Hence this patient was started with external beam radiotherapy. But in cases with severe bone metastasis, even with radiotherapy outcome is generally poor. One of the study showed expectancy of life is less than 3 years. Hence we are reporting a case of follicular thyroid carcinoma that presented to our department with skull metastasis, that is a very rare presentation in cases of follicular carcinoma of thyroid.

Conclusion

Skull metastasis from thyroid carcinoma though rare, we must always keep in mind the possibility. Swelling in the neck that are presenting at later stages of life with a history of long duration has all the possibilities of distant metastasis. Imaging characteristics, systematic multi-disciplinary approach must be carried out. In cases with late presentation, radiotherapy is the only choice to give palliative care to the patient as thyroid carcinoma with bone metastasis outcome is very poor.

References

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