CA THYROID WITH METASTASES

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ABSTRACT

BACKGROUND
Thyroid malignancy occurs with relative infrequency, although benign thyroid disease is relatively common. Most primary thyroid cancer are derived from follicular or parafollicular cells. Follicular carcinoma affect women more than men. Invasive follicular carcinoma metastasises in 20 - 40% cases. Distant metastases are seen in a minority of patients and the reported rates of occurrence range from 4 to 15%. We report a case of 61 yrs. female who came with chief complaints of severe headache and bilateral decreased vision. On imaging studies, which was diagnosed as skull base metastases from primary carcinoma of thyroid.

KEYWORDS
Carcinoma Thyroid, Skull Base Mets.


BACKGROUND
Thyroid malignancies are divided into papillary carcinomas (80%), follicular carcinomas (10%), medullary thyroid carcinomas (5 - 10%), anaplastic carcinomas (1 - 2%), primary thyroid lymphomas (rare) and primary thyroid sarcomas (rare). The most common site of distant metastases is the lung followed by the bone.

Metastasis to skull base are rare phenomenon in thyroid malignancies. Skull metastasis is uncommon and is found in 2.5% - 5.8% of cases of thyroid cancer. We report a case of 61 yrs. female who came with chief complaints of severe headache and bilateral decreased vision and was diagnosed as case of skull base metastases from primary carcinoma of thyroid.

CASE REPORT
Patient was 61 yrs. female, came with chief complaints of -

- Severe headache.
- Decreased bilateral vision.
- A NECT Head was done.
- Axial CT sections revealed a hyperdense mass lesion at skull base. This mass lesion was causing erosion of adjacent bones. There were evidence of calciﬁcation within the mass.
- CECT Head was done further, which revealed it to be intensely enhancing suggesting its hypervascular nature.
- MRI Brain plain with contrast was done.
- The lesion was mildly hyperintense on T1 weighted images; on T2 weighted images it was isointense and showed mild restriction on diffusion weighted images. On T1 post contrast images, it showed intense enhancement.
- There was no compression of cavernous ICA by this lesion. This lesion was extending up to foramen ovale and foramen spinosum bilaterally.
Differentials given were -
- Chordoma.
- Chondrosarcoma.
- Metastasis.

Excisional biopsy was done - Histopathological features suggested Metastatic Epithelial Malignancy (Possibly from Thyroid).

A USG Thyroid was done, which revealed a hypoechoic nodule in right lobe of thyroid, which showed internal vascularity on Colour Doppler.

USG-guided FNAC was done - Cytomorphological features were suggestive for Follicular Neoplasm.

Further body imaging was done. CT Thorax revealed multiple nodules randomly distributed in bilateral lung field suggestive of cannon ball metastases.

DISCUSSION
The method of spread of Thyroid Carcinoma into the skull and skull base is likely via the haematogenous route. Batson demonstrated a vertebral venous plexus, which consisted of a valveless vascular bed within the spinal canal and extended from the skull to the pelvis.8

Batson and Eckenhoff showed that there were multiple anastomoses and free connections between this venous plexus and the dural sinuses, the emissary veins of the skull as well as numerous junctions with the cervical plexus.9

Recently arterial spread has also been suggested because of the association with secondary cutaneous locations in the territory of ipsilateral external carotid artery.10

Other Tumours at this Location can be
Chordoma
In the midline, nearest differential absence of any other primary in body is highly suggestive.

Chondrosarcoma
Usually off midline.

CONCLUSION
Metastases to skull base from primary thyroid malignancy is a rare entity. Imaging plays an important role in distinguishing it from other skull base lesions and establishing the primary neoplasm. It also helps in detecting other distant metastases.

REFERENCES