

An unusual presentation of metastatic thyroid carcinoma

B Ngqamba, I Buccimazza,  S Ismail 

Breast and Endocrine Unit, Department of Specialised Surgery, Inkosi Albert Luthuli Central Hospital, South Africa

Corresponding author, email: ines.buccimazza@gmail.com



A 55-year-old female presented with a 6-year history of a scalp mass. Clinical assessment revealed a non-toxic right thyroid nodule and 18 x 17 cm scalp mass with facial varicosities (Figure 1).

A skull X-ray (Figure 2a) and brain computerised tomography (CT) scan (Figure 2b) revealed extensive erosion of the parieto-occipital bones and a lobulated mass extending within the right parietal lobe. Ultrasound-guided core biopsy of the scalp mass confirmed the clinical suspicion of metastatic follicular thyroid carcinoma. A staging CT scan demonstrated lung metastases, but no other bone metastases.

She died prior to receiving palliative treatment, namely external beam radiotherapy to arrest growth of the mass.

Teaching point

In low-resourced environments, follicular thyroid carcinoma (FTC) may initially present with distant metastases, usually in bones, and typically in the spine, pelvis and scapula. Skull metastases from thyroid carcinoma is uncommon and have been reported in only 2.5% of patients; when they occur, it is mostly due to FTC.

The finding of extensive erosion of cranial bones in the absence of other bone metastatic sites is extremely unusual,



Figure 1: Clinical image
Large scalp mass (black arrow) with facial varicosities (red arrow)

given that this form of differentiated thyroid carcinoma typically spreads via the hematogenous route. A core needle biopsy is crucial to differentiate between the various malignant tumours that commonly metastasise to the skull, such as breast and lung carcinoma, prostate carcinoma in men and lymphoma.

ORCID

I Buccimazza  <https://orcid.org/0000-0002-5399-3101>

S Ismail  <https://orcid.org/0009-0000-5836-5641>

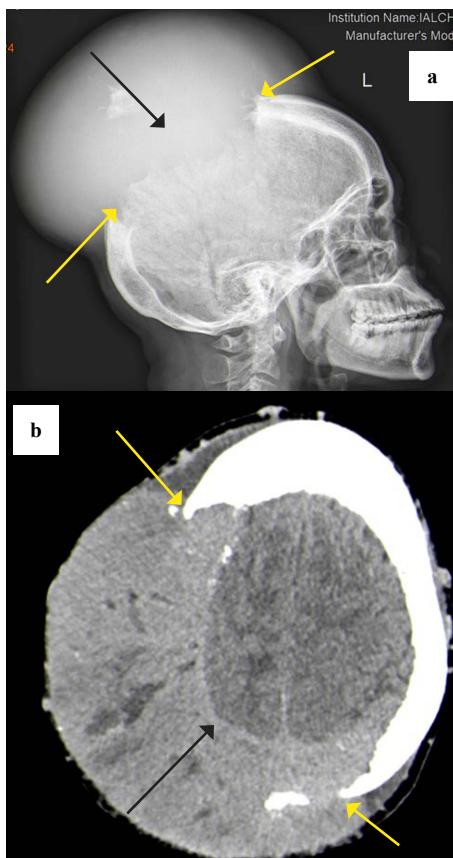


Figure 2: A - Skull X-ray. B - CT scan (axial view)
Erosion of the parieto-occipital bones (yellow arrows) with extrusion of a lobulated soft tissue mass extending into the right parietal lobe (black arrow)