Benign Nonmeningothelial Neoplasm

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A 30-year-old female presented with history of chronic non specific "off and on" headache since last 6 months. Over last 15 days headache was particularly intense and more so on the right side and she had one episode of black out for which an MRI was advised. She underwent surgical excision subsequently and biopsy was suggestive of a benign nonmeningothelial neoplasm - osteoma.

As defined by WHO, benign nonmeningothelial neoplasms are nonmeningotheliomatous mesenchymal benign neoplastic like processes of dura, skull or scalp and include chondroma (CD), osteochondroma (OCD) and osteoma (OST).[1]

Osteomas are most common primary calvarial tumors affecting approximately 0.4 % of population with females

being thrice as commonly affected as males and peak incidence in sixth decade Most involve the outer table, inner table origin being very rare. Osteomas are typically slow growing neoplasms and like most other tumors in this group are asymptomatic. If involving outer table, bony lump is the frequent presenting finding.[2] As expected, they are hyperdense on CT scans and do not show enhancement. On MRI, they are typically hypointense on T1 images, while on T2 and FLAIR they may have variable signal intensity.[3]

Though diagnosis in cases such as the one illustrated is straightforward, differentials include benign or malignant meningothelial masses (meningiomas) and malignant nonmeningothelial masses such as osteosarcoma and primary meningeal sarcoma.[1,4]

Fig 1 (a & b) : Coronal T1 and sagittal T2 images show a large extra axial hypointense mass arising from the right Frontal bone (note buckling of underlying white matter, classical feature of an extra axial mass).

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