

Image in Medicine

Bhoomi Angirish¹, Bhavin Jankharia²

Quiz 1

CT scan images of a 38 year old man who presented with nasal blockage and left side proptosis.

Questions :

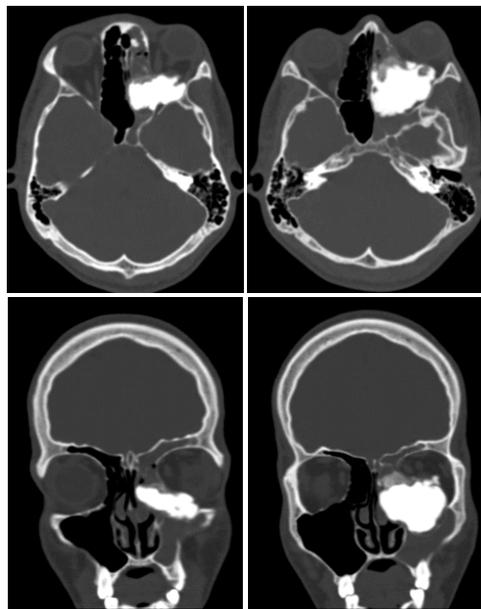
- (1) What is the diagnosis?
- (2) What are the common locations?
- (3) What is the differential diagnosis?

Answers :

(1) Well defined dense lesion (density similar to cortical bone) is seen in left posterior ethmoid sinus showing exophytic extension into orbital apex. Findings are in favour of osteoma of paranasal sinus.

(2) Osteomas are frequently seen elsewhere in the head and neck region, particularly in mandible and outer table of skull vault. Their frequency of distribution within the paranasal sinuses is as follows: Frontal sinus (~80%), ethmoid air cells (~15%), maxillary sinus (~5%) and sphenoid sinus (rare).

(3) The imaging differentials include fibrous dysplasia - which is less dense and shows ground glass density. Osteogenic tumours such as osteblastoma and osteosarcoma are other differentials.



Quiz 2

A 24 year old man presented with orbital injury and blurring of vision.

Questions :

- (1) What is the diagnosis?
- (2) What is the role of various imaging modalities in ocular injury?

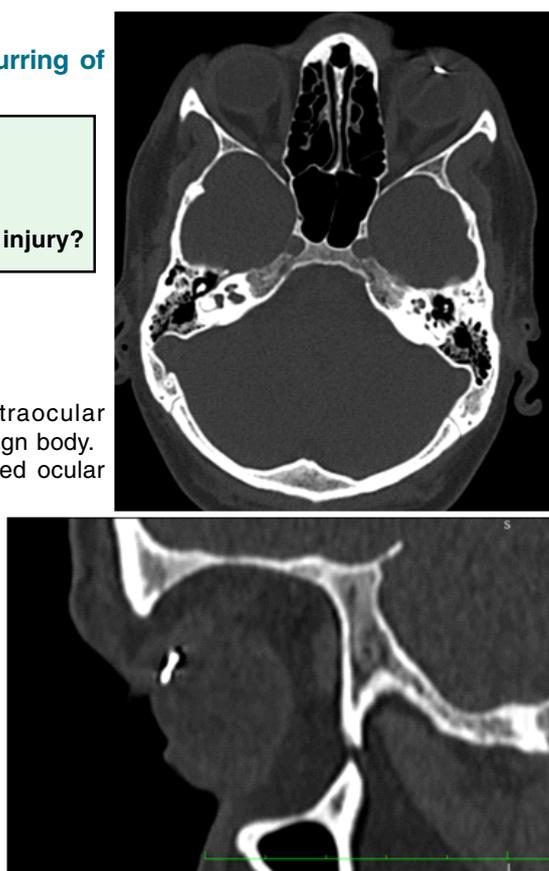
Answers :

(1) Hyperdense foci with streak artefacts is seen in intraocular compartment of left orbit, suggestive of metallic intraocular foreign body.

(2) Ultrasonography can be useful for detection of associated ocular injuries like vitreous hemorrhage, vitreous detachment, however it does not precisely determine the location of foreign body.

CT scan is preferred modality in case of metallic foreign body. It also helps to detect associated bony injuries.

MR imaging may be considered superior to CT if the intraocular foreign body is composed of wood; however, MR imaging is contraindicated if any possibility exists that the intraocular foreign body is composed of metal.



Department of Radiology, Picture This by Jankharia, Mumbai, Maharashtra 400004

¹MD, DNB (Radiology)

²MD, DMRD (Radiology)