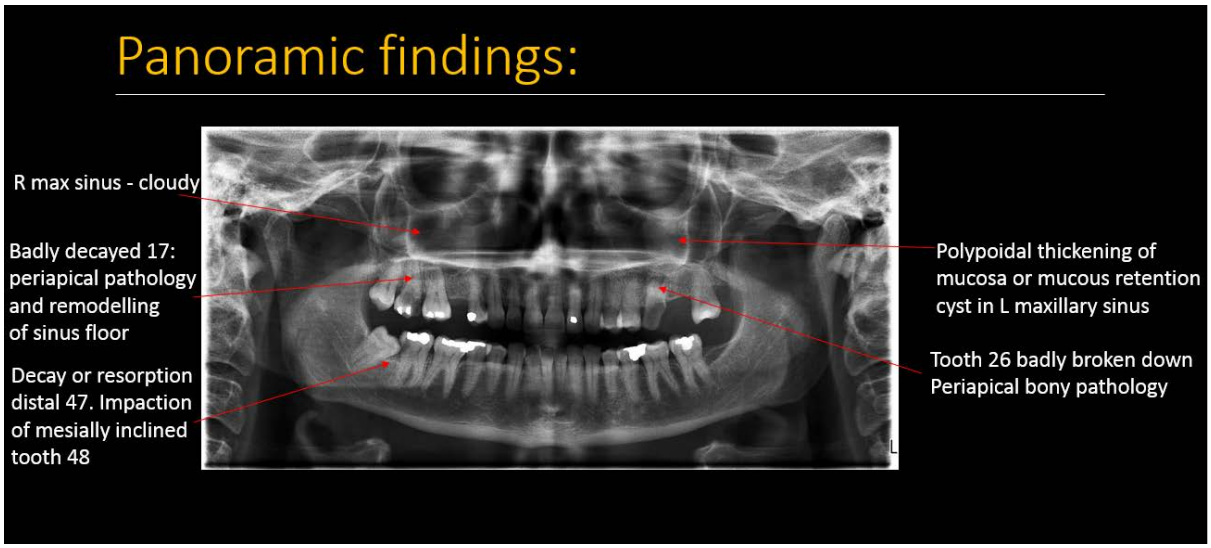
Case report: An illustration of incidental findings

Patient details: Female, aged 41 years. The patient was aware of long standing chronic sinus problems. Non-smoker. No other relevant medical history.

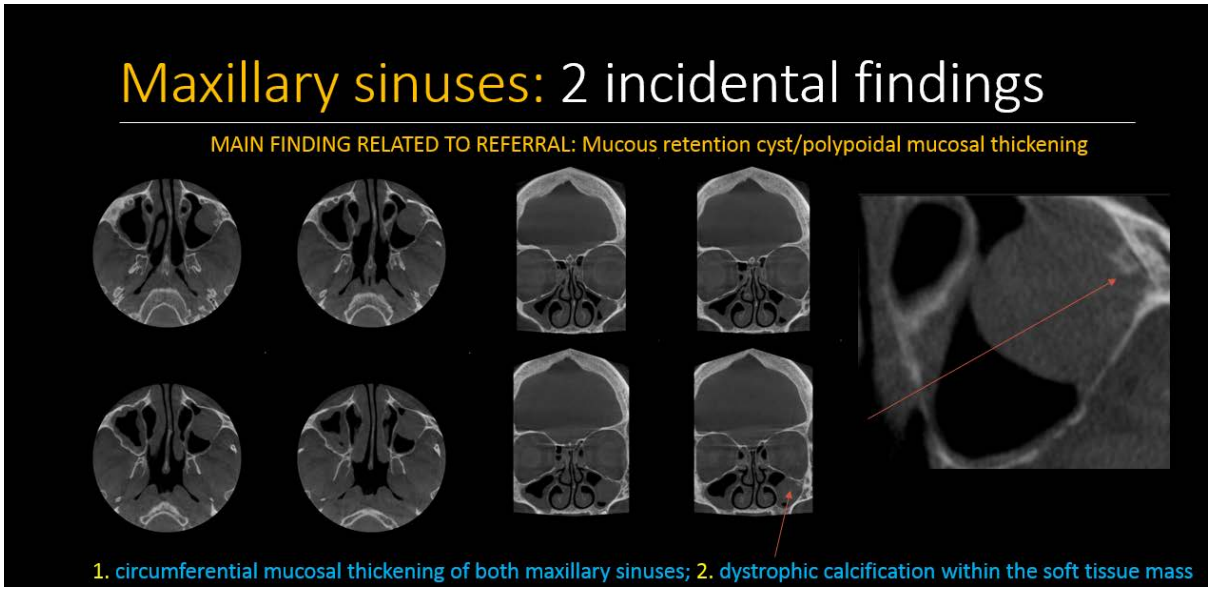
Reason for referral for cone beam CT: Significant pathology of the left maxillary sinus (detected on recent OPG)

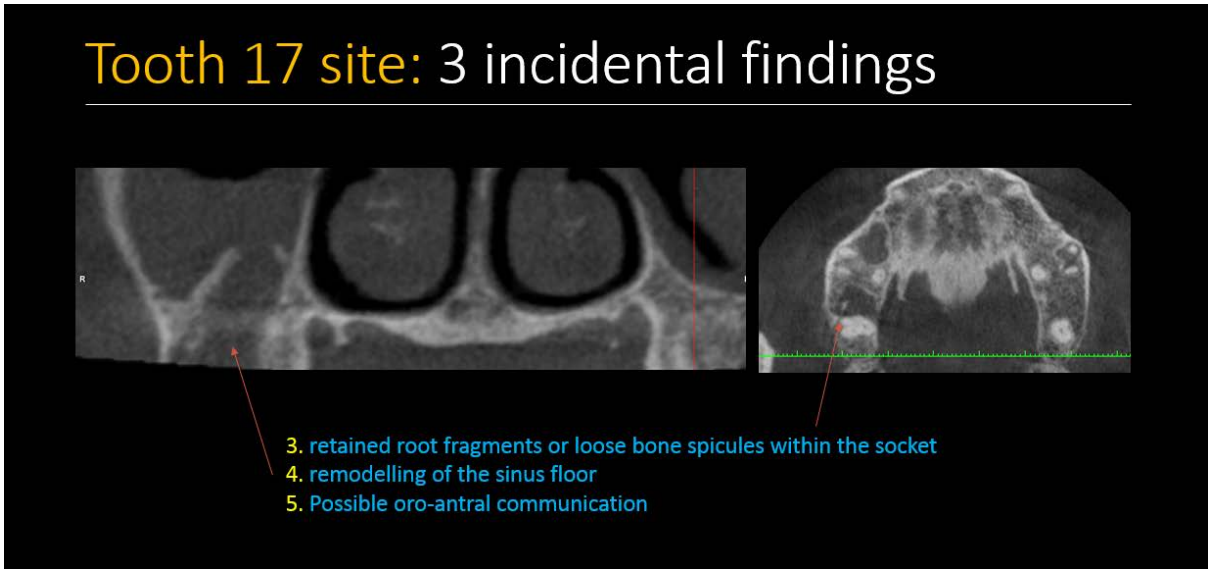
OPG:



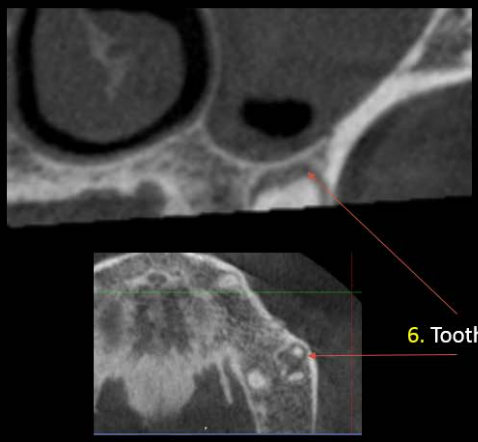
Cone beam CT:

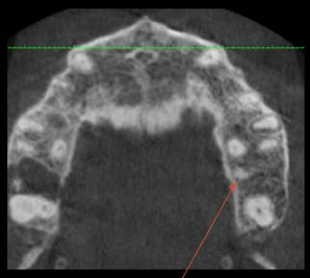
VOXEL SIZE (µm): 200. DAP (mGy x cm^2): 2978.2





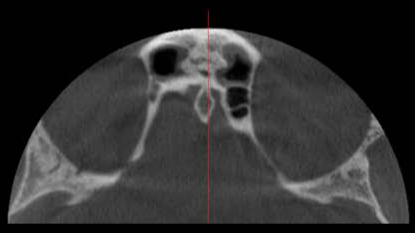
26 – 27 sites: 2 incidental findings

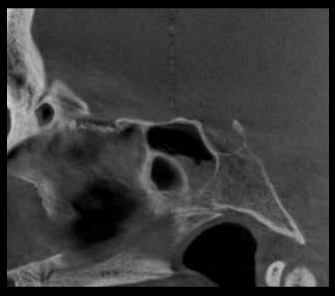




6. Tooth 26: periapical bony pathology 7. Tooth 27: retained palatal root

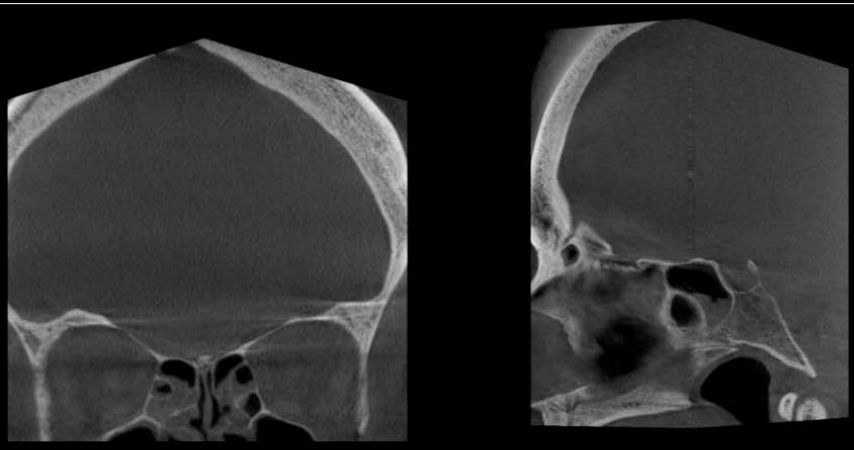
Ethmoid, sphenoid and frontal sinuses: 4 incidental findings





8. mucosal thickening or mucous is present on the floor of both frontal sinuses
9. substantial mucosal thickening or mucous on floor of the sphenoid sinuses
10. appearance of bubbles suggestive of mucous accumulation
11. mucosal thickening and/or mucous within the ethmoid air cells

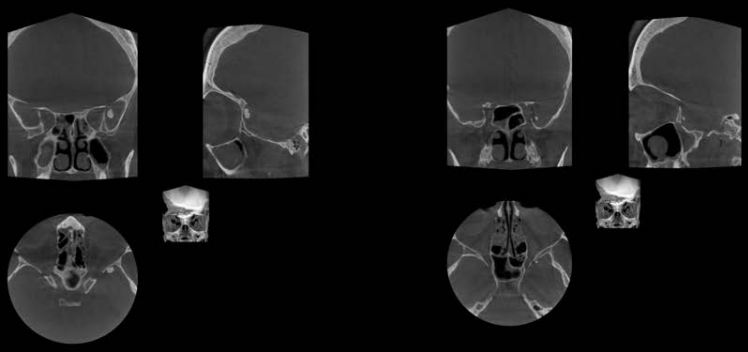
Frontal bone: one incidental finding



13. Thickening of the frontal bone is noted incidentally (Hyperostosis frontalis interna)

Cerebral tissues: one incidental finding

Calcifications within brain parenchyma



14. Two distinct calcified bodies lateral and posterior to the left orbit, within the parenchyma of the brain
possible diagnoses include calcified dural plaque or meningioma

Radiology Report: Cone beam CT

Multiplanar views of the paranasal sinuses are provided.

There are signs of a recent extraction in the 17 site and there may be retained root fragments or loose bone spicules within the socket, closer to the buccal aspect. There has been remodelling of the sinus floor in the apical region of the 17 socket, most likely in response to previous longstanding chronic periapical inflammation of the 17. There appears to be an oro-antral communication between the socket and the right maxillary sinus, although I cannot exclude that this appearance may be projectional due to the resolution of the cone beam unit. There is a retained palatal root in the 27 site and there is periapical bony pathology associated with tooth 26.

There is circumferential mucosal thickening of both maxillary sinuses. There is a large polypoidal mass, possibly a mucous retention cyst, in the left maxillary antrum, arising from the anterior and posterior walls. There is dystrophic calcification within the soft tissue mass, near the posterior wall and this may be inspissated mucous or secondary to a fungal sinusitis.

The ostiomeatal complexes are patent bilaterally. There is slight deviation of the nasal septum to the left. There is no obstruction in the post nasal space.

Mucosal thickening or mucous is present on the floor of both frontal sinuses. There is substantial mucosal thickening or mucous on floor of the sphenoid sinuses, with the appearance of bubbles suggestive of mucous accumulation. There is also mucosal thickening and/or mucous within the ethmoid air cells bilaterally and this is more pronounced in the anterior and middle air cells.

Other:

- There are two distinct calcified bodies lateral and posterior to the left orbit, within the parenchyma of the brain. They are not attached to the surrounding bone. They have the appearance of soft tissue calcifications. The larger calcification is situated distal to the superior orbital fissure at the level of the anterior clinoid processes. It lies in close relation to the posterior wall of the orbit, formed by the greater wing of the sphenoid bone. The mass has a round shape, but with an irregular outline and there is some variation in the radiodensity within the calcified mass. The second, smaller calcification lies inferiorly and medially to the larger mass, close to the medial aspect of the superior orbital fissure. The possible diagnoses include calcified dural plaque or meningioma. Referral of the patient to her GP to arrange further imaging such as MRI or CT with contrast, to evaluate the opacities is indicated.
- Thickening of the frontal bone is noted incidentally.

Reported by: Dr Louise Brown, Dentomaxillofacial Radiologist