OSTEOMA

In the head and neck area, osteoma is most common in the frontal sinus. It is also seen in the other paranasal sinuses and in the jaws. In the external auditory canal it must be distinguished from exostosis, a much more common condition in that site. Microscopically, in the compact form of osteoma, there is dense, mature, lamellar bone with interosseous fibrovascular stroma. In the cancellous type there are trabeculae of bone and fibro-fatty marrow.

Osteoma is rare in the ear canal. Usually it is solitary and arises near the isthmus of the canal. Occasionally there is an osteoma that arises from the promontory of the middle ear or from the wall of the middle ear just inside the annulus. Microscopically, an osteoma shows vascular channels that are absent in an exostosis and the bone is cancellous unlike the lamellar arrangement of the bone of an exostosis.

Unlike osteoma, exostosis of the ear canal is common where it appears as a bony growth seen in the inner aspect of the ear canal. Often they are multiple (and bilateral) and seem to result from exposure of the ear canal to cold water such as occurs during years of surfing or swimming. The tumor is lamellated and very compact so that a section might look like the rings seen in a cross section of a tree or an onion. There are no vascular channels or marrow spaces as seen in an osteoma (rare in ear canal).

Most exostosis of the ear canal produce no symptoms since they are sessile and do not obstruct the ear canal. However, some grow large, and especially when multiple, there may be trapping of cerumen and squamous debris causing infection.
Osteoma, frontal sinus. Dense bone and fibrovascular interosseous tissue is covered by normal epithelium (arrows) under which is edematous submucosal tissue.

Osteoma. Cancellous bone with fibrous tissue in marrow spaces.
**Clinical Aspects**

Most osteomas of the frontal sinus, their usual location, are small and unrelated to the nasofrontal duct and therefore cause no symptoms. Sometimes, however, either a small or large osteoma will block the opening of the duct and produce a mucocele which in turn may result in proptosis as the orbit is displaced downward or exposure of the dura by erosion of the anterior table of the skull. Treatment is by excision.

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