

Angiofibroma of the External Auditory Canal

The Editor,

Sir,

Angiofibromas account for less than 1% of all head and neck tumours and they predominantly arise in the nasopharynx (NPA), mainly affecting adolescent males (1–3). Extranaso-pharyngeal angiofibromas (ENPA) are very rare with less than 80 cases reported in the literature and none arising from the external auditory canal (1, 2).

We present a case of angiofibroma of the external auditory canal in a 40-year old male who presented to the ears nose and throat (ENT) Clinic with a one-month history of stuffiness, pain and purulent discharge from his left ear. He had no history of trauma, ear infection or any co-morbidity. A pink, firm, smooth mass in the left external meatus (Fig. 1) was attached to the postero-superior canal wall, 1 cm deep to the external auditory meatus.

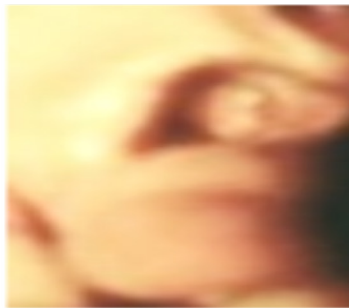


Fig. 1: Tumour seen in external auditory meatus

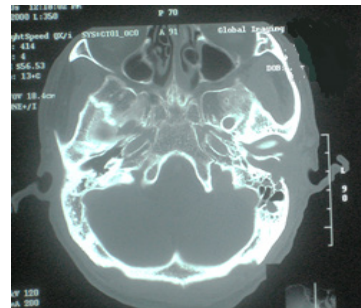


Fig. 2: Computed tomography scan showing mastoid cells erosion

There was a mucopurulent discharge and the mass started to bleed on probing. There was no mastoid swelling, tenderness, or any cervical lymphadenopathy. He had conductive deafness in the same ear. Computed tomography scan (Fig. 2) showed soft-tissue opacification in the left auditory canal with bony erosion and mild soft-tissue opacification of the left mastoid air cells. Conservative treatment for an infected ear polyp failed.

Excisional biopsy *via* a posterior aural incision extracted a homogenous, pink, 2 cm long, firm tubular mass from the external auditory canal (Fig. 3).

The adjoining partially eroded mastoid antrum wall was curetted out. Histological examination (Fig. 4) revealed spindle cells with minimal atypia and thin dilated vessels suggestive of angiofibroma. Immunohistochemistry was not available. There was no recurrence after one year.

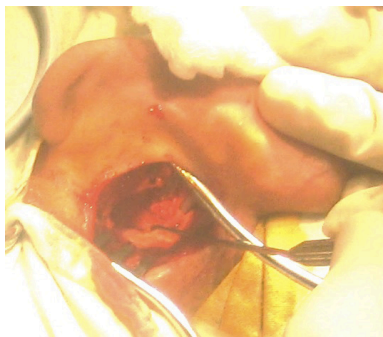


Fig. 3: Post aural incision to expose the tumour.

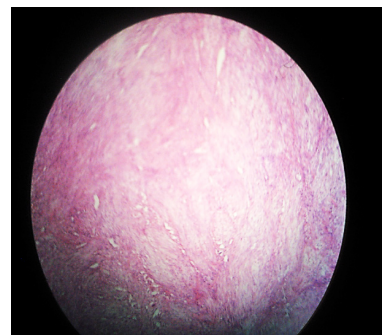


Fig. 4: Histology under low power magnification.

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Angiofibromas are fibrovascular benign tumours with irregularly shaped thin walled vessels embedded in a fibrous or cartilaginous stroma containing numerous spindle to stellate shaped cells (2). Extranasopharyngeal angiofibromas have been reported in the maxillary sinus, ethmoid, nasal septum and cavity, sphenoid, larynx, cheek, tonsils, buccal, molar region and conjunctiva (1–3).

While histologically similar, there are significant differences between NPA and ENPA that warrant their being considered as clinically distinct entities (1–3). In NPA, the diagnosis is often straightforward because of its clinical epidemiology, symptomatology, occurrence in adolescent males and the distinctive radiographic features (2). In ENPA, diagnosis may occasionally be missed or delayed just like in our case because of a combination of rarity and variable nonspecific signs and symptoms based on the location (1–3).

Patients with ENPA tend to present earlier than NPA because the nasopharynx has a larger area for tumour growth. Computed tomography scans and magnetic resonance imaging show tumour size and degree of surrounding tissue invasion. Carotid or selective angiography may be useful to indicate tumour vascularity and permit preoperative embolization to reduce bleeding (2). Preoperative biopsy of NPA is inadvisable due to the risk of brisk, torrential bleeding; however, this is uncommon in ENPA. The earlier presentation and less aggressive growth of ENPA likely contribute to its good outcome and rare recurrence after surgical resection (1–3). Differential diagnoses include vascular tumours, infected polyps, angiofibrolipoma, solitary fibrous tumour, myxomas, fibromyoid sarcoma and liposarcoma (1–3), hence confirmation requires histological examination.

Keywords: Angiofibroma, external auditory canal, extranasopharyngeal angiofibroma.

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