Osteoclastoma of Temporal Bone
A CASE REPORT

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Osteoclastoma of the bone is not a very common bone tumour, occurring in the vast majority of cases at the ends of long bones. Instances of localization, other than in the long bones constitutes about 15-20% of all the cases (Jaffe-1961). Its occurrence in the skull bones, especially the temporal bone, is rare. According to Jaffe (1961) the older statistics on giant cell tumours of jaw bones include mistakenly 'Brown tumours' in cases of hyperparathyroidism. Lord & Stewart (1943) reported two cases of osteoclastoma of temporal bone with a review of literature and found only two well-authenticated examples namely those of Doderlein (1913) and Ramadier and Tournay (1937). Among the other sites of skull bones involved are frontal bone (Frazer 1931: Mathers & Cappel 1938), ethmoid (Wattles 1937), Septum of the nose (Weider 1932) and hard palate (Ballon 1941).

Perusal of the subsequent literature on the subject did not reveal any additional cases.

Case Report

R.M.C. a Hindu male aged about 35 years was seen as an outdoor patient on 18.9.67 for tinnitus, progressive deafness in right ear, of 8 months duration. He had a gradually increasing swelling above the right ear of 6 months duration; and pain dizziness of 1 month's duration; and inability to close right eye of 3 day's duration. Patient did not give history of either purulent or blood stained discharge from the ear.

General examination of the patient did not reveal any abnormality. Local examination revealed a smooth spherical swelling measuring about 4 cms in by 2.5 cms infront and above the point where helix joins the scalp. The swelling was extending anteriorly to the middle of the zygomatic arch, inferiorly to the right temporo-mandibular joint was above and behind to the squama, displacing the right pinna slightly.
downwards and forwards. The swelling was diffuse, firm, non-fluctuating, non-tender and without signs of inflammation. Cervical lymph glands were not palpable. Movements of temporomandibular joints were normal.

Examination of the right ear revealed almost complete occlusion of the right external auditory meatus with a sagging of postero-superior wall. The ear drum could not be seen. Retro-auricular sulcus was unobliterated and the mastoid was not ironed out. Tuning fork test with 256, 512, 1024 c.p.s. showed conductive deafness and Weber's was laterialized to the affected ear. Fistula test was negative and there was no spontaneous nystagmus. Patient had right infranuclear facial paralysis. Patient was hospitalized. A provisional clinical diagnosis of Tumour or Granuloma of the temporal bone was made. Investigations carried out subsequently did not reveal anything relevant except for X-ray of the mastoid and temporomandibular joint, which showed bony defect in the right temporal bone with thinning of the roof of right temporomandibular joint. Attempt at aspiration of the swelling failed. The temporomandibular joint was aspirated and straw coloured fluid was drawn which was sterile on culture. The aspiration decompressed the nerve with remarkable improvement in the facial paralysis.

Patient was operated on 4.10.1967 through a standard post aural incision and the mastoid was explored. Whole of the mastoid cavity was occupied by dark brown exuberant granulation tissue. Posterior meatal wall, bridge, sinus plate, and tegmen were found destroyed, Granulations were gently scooped out and removed by Suction. Dura of the middle cranial fossa over an area of 2.5 cm by 1.5 cms was exposed and was also found to be covered with similar granulation tissue. Ossicles were found completely embedded in the granulation tissue. Incus and malleous were removed and the inner layer of the drum was found to be covered with similar granulation tissue. Anteriorly it was extending to the attic, the zygomatic arch and the temporomandibular joint. Attempt was made to scoop out as much as was possible. Facial nerve was not explored as already there were signs of recovery. The cavity was irrigated with penicillin solution and the wound was closed with a pack inside the cavity. The tissue was submitted for histopathologic examination. Post operative period was uneventful. Facial palsy completely recovered and the patient was discharged on 29.10.1967.

Post operatively a tumour dose of 2500 roentgens was given. The patient was last seen in June 1968, when he complained of mild headache and deafness in the right ear. He had resumed his normal duties and facial paralysis had completely recovered. Mastoid cavity was found wet with slight discharge and there was epilation and pigmentation of the overlying skin. Neurological examination was normal.

Macroscopic Examination: The scooped out material consisted of several brownish friable bits of tissue varying in size from 1.5 cms to 0.5 cms. The cut section showed a brown colour.

Microscopic Examination: Section through the specimen stained with Haematoxylin and Eosin method