Fig I : Clinical photograph of the child with swelling near Rt. medial canthus

Fig II : Intra operative photograph showing polypoidal mass from the lacrimal sac

Fig III : Histopathology of the lesion stained with hematoxylin and eosin, under high power view, showing sporangia.

dacryocystitis or otherwise, is better dealt with the endoscopic approach for its direct exposure and minimal discomfort to the patient. This avoids external scar and seeding at external incision site.⁶

CONCLUSION

In all cases of lacrimal sac pathology, one needs to keep a clinical diagnosis of rhinosporidiosis in mind. Although dacryocystectomy has been described as the treatment of choice, an endonasal DCR with excision of the lesion, followed by postoperative dapsone therapy for a year, could suffice. However, long term follow up and more number of case studies are necessary to establish efficacy of this modality of management.

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Short Communications

NASOPHARYNGEAL CARCINOMA PRESENTING AS GRADENIGO'S SYNDROME

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Abstract: Nasopharyngeal carcinoma usually has an insidious onset and non-specific features in the initial stages. This makes early diagnosis difficult. The most usual presenting features are cervical lymphadenopathy, otological symptoms (serous otitis media) and involvement of adjacent cranial nerves. We report a case of Gradenigo's syndrome in a patient of undifferentiated nasopharyngeal carcinoma.

Keywords: Nasopharyngeal carcinoma, Gradenigo's syndrome

INTRODUCTION

Classic gradenigo syndrome with triad of sixth nerve palsy, pain in the distribution of the fifth nerve, and otitis media is very rare

entity these days. Though generally caused by otitis media and mastoiditis in the region of the apex of the petrous temporal bone, in recent times, other causes have been recognized for instance nasopharyngeal malignancies, meningioma, fractures, and 'T' cell

Fig 1: Preoperative photograph of the patient showing lateral rectus palsy in left eye.

Fig 2: CT scan showing mass in the left nasopharynx invading the clivus and Infiltrating the petrous apex.

Fig 3: CT scan showing invasive mass in left nasopharynx.

lymphoma.^{1,2} Nasopharyngeal carcinoma is a condition which usually has an insidious onset and non-specific features in the initial stages, so it is difficult to make an early diagnosis. The most usual presenting features are cervical lymphadenopathy, otological signs (serous otitis media) and involvement of adjacent cranial nerves.¹ We report a case of Gradenigo's syndrome due to the nasopharyngeal malignancy spreading towards the base of the skull.

CASE REPORT

A 15-year-old boy presented to our outdoor with history of discharge from left ear and deafness for last 2 months and severe pain in left side of head for last 2 weeks. The discharge was persistent in nature and was purulent and profuse. On examination of the ear, the pinna was normal. External auditory canal contains a large polypoidal mass, which was congested and edematous. Probing revealed it to arise from middle ear. Right ear was within normal limits.

Ophthalmologic examination revealed lateral rectus palsy in left eye indicating abducent nerve palsy (Fig 1). Right eye was within normal limit. Visual acuity was normal and no afferent pupillary defect or papilloedema could be detected. Audiometry revealed severe conductive deafness in left ear; hearing in right ear was within normal limit. On systemic examination, no significant findings are present. On routine blood examination, no significant findings were present. Computed tomogram showed a lytic lesion at the apex of the petrous temporal bone with soft tissue shadow in mastoid antrum. The patient underwent radical mastoid exploration, which revealed antrum full of granulation tissue, and mass which was continuous with the mass coming out of the external auditory canal. The mass was removed meticulously and sent for histopathological examination. Postoperative recovery was uneventful. The patient returned after 15 days with histopathological report, which revealed undifferentiated nasopharyngeal carcinoma. He also complained of retro orbital pain, which was burning and stinging in nature and double vision on attempted lateral gaze. Subsequently he developed difficulty in swallowing and mild nasal regurgitation of fluid and intermittent aspiration and cough. Photophobia, excessive lacrimation, fever was absent. Neurological examination suggested involvement of the left V,

VI, VIII and X cranial nerves. Corroborating the clinical finding with histopathological report computed tomography (CT) of nasopharynx was asked for which showed a mass in the left nasopharynx invading the clivus and infiltrating the petrous apex (Fig 2,3) Nasal endoscopy was done and biopsy was taken from the mass and sent for histopathological examination, which revealed the mass as undifferentiated nasopharyngeal carcinoma.

DISCUSSION

In 1904 Gradenigo's described a syndrome characterized by triad of sixth nerve palsy, pain in the distribution of the fifth nerve, and otitis media which came to be known as Gradenigo syndrome (Gradenigo-petrosum syndrome, Gradenigo-Lannois syndrome, Lannois-Gradenigo syndrome).^{1,4} The neurological manifestations of Gradenigo syndrome are attributed to the involvement of the fifth and sixth cranial nerves that are only separated from the inflamed petrous apex by dura mater. The inflammatory process spreads from the base (mastoid and middle ear) of the pyramid-shaped os petrosum to its top (petrous apex). This explains why the time interval between the onset of the otitis media and the manifestation of cranial nerve dysfunction varies between 1-3 weeks. For the clinical diagnosis of petrositis the deep facial or ear pain appears to be the most useful symptom.⁴

This syndrome is generally caused by otitis media and mastoiditis in the region of the apex of the petrous temporal bone. In recent times, however, other causes have been recognized for instance, nasopharyngeal carcinoma, meningioma, fractures, and T cell lymphoma.^{1,2} Radiological examination is the primary means of supporting a clinical suspicion. Nevertheless, as we see in this case, radiological changes in the petrous apex might not be readily apparent until several weeks into the course of the illness, even with the most sophisticated CT scanner. Our case presented with symptoms of chronic otitis media with acute exacerbation and associated complication of aural polyp. The initial decision to carry out mastoid exploration was based on the clinical features and CT finding of temporal bone, which revealed a lytic lesion at the apex of the petrous temporal bone with soft tissue shadow in mastoid antrum, which appeared consistent with diagnosis of cholesteatoma. Since the CT scan evaluated only temporal bone and not the nasopharynx, the diagnosis of nasopharyngeal malignancy was missed. The suspicion of nasopharyngeal

malignancy was strengthened when the symptoms of Gradenigo syndrome was associated with symptoms like dysphagia, nasal regurgitation of fluid and intermittent aspiration and cough indicating involvement of the left V, VI, VIII and X cranial nerves.

Nasopharyngeal carcinomas are epithelial neoplasms that are seen only sporadically in the Western hemisphere. In southern China, however, they are endemic; they represent the third most common malignancy in men there. This carcinoma is also common in Indian subcontinent. It has a bimodal presentation but the main problem is late diagnosis.^{3,5} They may present in various ways as such as cervical lymphadenopathy, multiple cranial nerve palsies nasal discharge, epistaxis etc. However, the presentation primarily with Gradenigo's syndrome is indeed a rare one.

CONCLUSIONS

Diagnosis of nasopharyngeal carcinoma requires a high index of suspicion in view of its initial, sparse, non-specific symptoms. Although ideally the disease should be detected in its early stages, we believe that it is useful to recommend that in cases of Gradenigo's syndrome a full systematic otorhinolaryngological exploration be made to effectively rule out this disorder.

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Short Communications

MACROGLOSSIA DUE TO VENOUS MALFORMATION

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Abstract : Massive vascular malformation involving tongue can cause significant functional impairment. In this report we describe a rare case of extensive venous malformation involving tongue leading to obstructive sleep apnoea, inability to speak, eat, severe discomfort due to exposure induced dryness and ulceration. Multimodality treatment approach comprising of sclerotherapy, electrocautery and radiation therapy was used in this case.

Keywords: Macroglossia, venous malformation, Sclerotherapy, Electrocautery, Radiotherapy.

INTRODUCTION

Vascular malformations are extremely common lesions, accounting for approximately 7% of all benign tumors. Although the head and neck constitute less than 14% of the total surface area of the body, approximately 50% of all vascular malformations occur in this region⁴. Venous malformation is a soft, compressible, non-pulsatile mass with rapid refilling. Expansion occurs on compression of the jugular vein or valsalva maneuver. In addition to the occasional devastating cosmetic effects of large vascular formation, some may cause significant functional impairment by encroaching on the eye, tongue or throat. They pose a challenging therapeutic and reconstructive problem. Treatment options are variable and include sclerotherapy, photocoagulation and surgical resection.

CASE REPORT

A 14-year old male presented to us with complaints of an enlarged tongue with difficulty in speaking. There was history of recurrent ulceration of tongue with odynophagia. Patient also complained of recurrent episodes of breathing difficulty during sleep. On examination anterior two-third of tongue was enlarged with bluish discoloration, non-tender, soft, and spongy in consistency, compressible with rapid refilling. There was no palpable thrill or bruit on auscultation. Base of tongue was uninvolved. Indirect laryngoscopy was normal. Swelling had areas of phlebothrombosis. Swelling used to expand during sleep, valsalva maneuver and on bilateral jugular vein compression. CT Angiography showed generalized hyper intense contrast uptake with normal arterial phase, macroglossia involving anterior two-