External auditory canal metastasis in nasopharyngeal carcinoma: A case report

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SUMMARY

Nasopharyngeal carcinoma (NPC) has higher incidence in South-East Asia. The most common sites for distant NPC metastases are the bone, lung, and liver. Metastasis to the external auditory canal (EAC) is rare. To our knowledge, there were less than 30 cases reported to date. We report a case of a 69-year-old Malay lady who is a slow learner, known case of NPC (T3N2M0) and completed radical radiotherapy in May 2019. She did not complete her concurrent chemotherapy as poor tolerance to side effects. Her initial surveillance follow-up was uneventful, until the 4th month in which she complained of right otalgia. Otoscopy examination revealed friable mass filling up the whole EAC. Nasoendoscope and neck examination were normal. Initial biopsy of the mass showed necrotic tissue and grew Pseudomonas aeruginosa. She was treated as otitis externa with multiple courses of local, oral and intravenous antibiotics. However subsequently she had right facial nerve palsy with profound hearing loss on the same site. The patient then underwent examination under general anaesthesia and biopsy of the right ear mass. Intra-operatively, showed worsening of the disease over right ear while nasoendoscopic examination showed normal mucosa seen over bilateral FOR. The histopathology examination revealed metastatic undifferentiated carcinoma, compatible with her initial NPC histology, while biopsy at the primary site was negative of malignancy. A CT brain and HRCT temporal bone revealed enhancing soft tissue density within the right EAC, middle ear and mastoid air cells causing erosion of tegmen tympani and tegmen mastoidea with enhancing thicken adjacent meninges. The right Eustachian tube and right FOR were normal, however the left FOR had a localized mucosal enhancement; in which likely post radiotherapy changes. There were also right level II cervical lymphadenopathy but no distant metastasis was seen. She was referred to the oncology team and planned for palliative radiation therapy. In conclusion, otological symptoms may be the presentation of recurrent NPC, and should be treated with a high index of suspicion. Prompt investigation for early diagnosis and treatment may improve prognosis.

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Endoscopic skull base repair of CSF leak using tisseel glue – Hospital Ampang experience: Challenges in laterally placed sphenoid defect with herniation

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SUMMARY

CSF rhinorrhoea is a result of an abnormal communication between the subarachnoid space and sinonasal tract. 90% of cases are due to trauma and another 10% due to non-traumatic. The most common site for non-traumatic CSF leak is the cribriform plate followed by the ethmoid roof. Traditionally, this condition was repaired via open craniotomy approach, however with the advancement of technology, endonasal endoscopic repair is preferred. We report 2 cases of spontaneous CSF rhinorrhoea which were endoscopically repaired via anterior skull base approach using a fat graft and fibrin sealant. Case 1, A 43-year-old Indian lady, presented with left-sided unilateral clear watery nasal discharge for 10 days duration. It was associated with low grade fever and one episode of syncopal attack at home. She had a one-week history of upper respiratory infection prior to this attack. On examination, there was no sign of meningism. She demonstrated a left-sided clear rhinorrhoea upon bending forward. Naso-endoscopic examination showed no abnormality. Contrast-enhanced CT brain and paranasal sinuses revealed multiple bony defects at the left roof of sphenoid sinus measuring 0.4cm x 0.6cm and MRI cisternography confirmed the mentioned defect with active flow of CSF through the defect. Thin linear hypointense structure was seen herniated through the defects which represent the meningocele. For case 2, A 45-year-old Chinese lady presented with spontaneous left-sided unilateral clear watery nasal discharge for 2 weeks duration when she bends forward. She denied any other associated symptoms. Upon examination, there were no signs of meningism. Nasoendoscopic examination was normal. Contrast-enhanced CT brain and paranasal sinuses revealed a bony defect at the roof of left sphenoid sinus measuring 0.7cm and MRI cisternography showed similar defect with temporal lobe meningoencephalocele causing CSF leak into the left sphenoid sinus. Both of these patients underwent endoscopic repair of CSF leak using Tisseel glue. Fat graft was harvested from the abdomen and reinforced with pedicled-Hadad-Bassagasteguy flap. Endoscopic endonasal repair of CSF rhinorrhea is the preferred method at present compared to open craniotomy as it has less complication, shorter recovery time and higher success rate. However, the laterally placed sphenoid defect with herniation gives a challenge in terms of approach and techniques. The usage of Tisseel fibrin glue to the fat graft and flap provide an effective and stable seal.