DISCUSSION

PAC is a rare and generalized asymptomatic lesion of petrous apex. It is characterized by herniation of the posterolateral wall of Meckel cave to the petrous apex, possibly due to increased intracranial pressure. Differential diagnosis is important for proper surgical treatment planning. Differential diagnosis includes cholesterol granuloma, mucocele, and cystic bone neoplasms such as cystic fibrous dysplasia, unicameral bone cyst, and aneurismal bone cyst.[1,5] PAC is seen as a cystic lesion that causes erosion of bone structure in CT images. Here, as in our case, cephaloceles can sometimes grow very large towards the base of the skull and mimic the sphenoidal cystic mass. It is important for the differential diagnosis from cystic neoplasms that there is no diffusion restriction and no contrast enhancement. Because MR imaging is isointense with CSF in all sequences, differential diagnosis is made from cholesterol granuloma which is hyperintense on T1-weighted images. Mucocele may also present as cystic expansile lesion of the sphenoid bone, but there are not any connection of the Meckel cave and cystic lesion in the mucocele.[1,2] In literature, it was found that there is a relationship between PAC and empty sella, to explain the physiopathology.[6–8] In our case, there was also empty sella and cerebellar tonsillary herniation, which supported this theory.

As a result, cephalocele should be considered in differential diagnosis of the expansile cystic lesions of the skull base and thus, unnecessary surgical procedures can be prevented by careful observation.

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An Otalgia Cause: Temporomandibular Joint Herniation From Foramen of Huschke to External Auditory Canal

Abdullah Kinar, MD, Abdulkadir Bucak, MD,† and Şahin Ulu, MD†*

Objectives: The authors presented a rare case of temporomandibular joint hernation into the external auditory canal. The authors discuss 1 cause of otalgia.

Case Report: A 52 year old male patient complained about his left ear otalgia for 3 months. Patient said that it had occurred after a painful mastication. On physical examination he had a rounded expanded mass in left ear external auditory canal that is located at the anterior-inferior wall of EAC When patient open his mouth the mass turn back to original position and mass was disappeared. Magnetic resonance imaging of the temporomandibular joint was revealed.

Conclusion: Foramen of Huschke a bony defect in tympanic plate that may cause the spontaneous herniation of temporomandibular joint to external auditory canal. This herniation cause otalgia commonly. Opening and closing the mouth and palpation of temporomandibuler joint should be a part of physical examination when finding out non-otological causes of otalgia.

Key Words: External auditory canal, mass, temporomandibular joint

In human body, the temporomandibular joint (TMJ) fossa and the external auditory canal (EAC) seperated by tympanic plate of temporal bone that lies between squamous and mastoid portion of temporal bone. Foramen of Huschke (FH) or foramen tympanicum is a defect in tympanic plate that may cause herniation of the mandibular fossa to antero-inferior wall of the external auditory canal. The prevalence of the FH is 2–23% in literature.[1]

In this case, we reported the herniation of TMJ to EAC that cause otalgia and dysmasesis (difficulty in masticating and chewing). Although FH found high in population, herniation of TMJ to EAC is very rare and also some of the herniations are asymptomatic.

CLINICAL REPORT

A 52 year old male patient complained about his left ear otalgia for 3 months. Patient said that it had occurred after a painful mastication. On physical examination he had a rounded expanded mass in left ear external auditory canal that is located at the anterior-inferior wall of EAC and it was for about 4×4 mm dimensions. When patient open his mouth the mass turn back to original position and mass was disappeared. Magnetic resonance imaging (MRI) of the temporomandibular joint was revealed and it was reported TMJ dislocation from mandibular condyle.

Figure 1 shows a sagittal view of left external auditory canal and TMJ. TMJ herniated to EAC form anteroinferior portion of the EAC. It reduces back when mouth open.

Supplemental Digital Content, Video 1, http://links.lww.com/SCS/B353, shows motion of the herniated mass when the mouth is open and closed.

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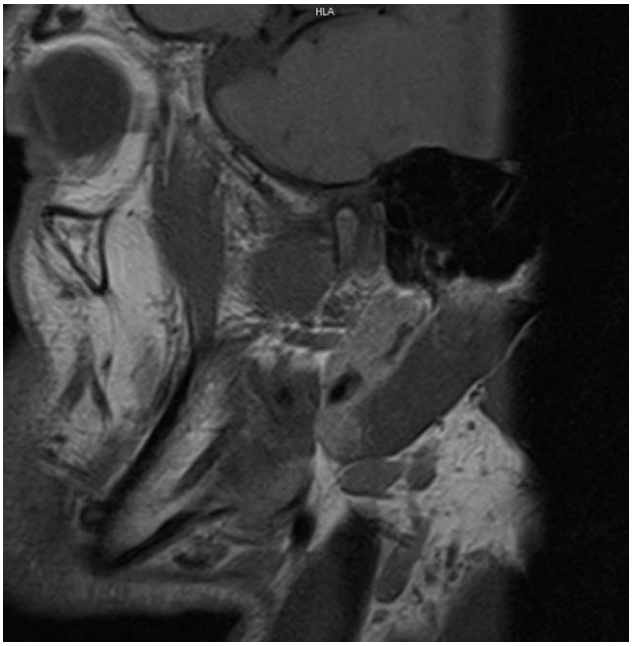

FIGURE 1. Sagittal view of left external auditory canal and TMJ. TMJ herniated to EAC form anteroinferior portion of the EAC. It reduces back when mouth open.

After referring oral and maxillofacial surgeon, we treated paint with analgesic drugs. The patient is following up without any surgical intervention.

DISCUSSION

Foramen tympanicum is anterior inferior portion of the EAC and it is incompletely formed at birth. Foramen tympanicum and also called Foramen of Husckhe closed by age five. Prevalence of the unclosed FH is approximately 2−23%. Despite the FH commonly found in human body, herniation of TMJ to EAC is very rare. It is due to small gap of FH closed by external ear canal epithelium in large population. Mastication in all life enlarges the defect and may cause TMJ herniation.[1]

In all cases about TMJ herniation to EAC, there is a mass at the anteroinferior portion of EAC. Its size could change from a small mass to big expandile mass. Herniated mass mostly reduce to its anatomical position and shrink when mouth is open.[1]

Our patient was 52 years old and it was consistent with the studies. Spontaneous herniation of TMJ to EAC mostly seen after 50 years of age.[1]

Our patient was complained about otalgia and he said that it was begin after a hard chewing of food. His right and left ear tympanic membrane was naturel. An expanded mass was observed approximately 3 lateral to left tympanic membrane at antero inferior portion. The mass was reduced to its origiinal position when mouth was opened. It was decided as TMJ hernation and TMJ MRI revealed. MRI reported left condyle of mandibula herniated to EAC.

Patients with these mass commonly have otalgia, otorrhoea, hearing loss, tinnitus and aural fullness in studies. It is important that the physician must be careful about otalgia etiologies and a careful examination should be done. TMJ diseases are one cause of otalgia like TMJ arthritis and dislocation. Patient should be examined with their mouth both closed and open. In our case, like many others in literature, patient was treated with analgesia and following up without any surgical intervention.[2] Shapiro et al reported a surgical treatment for the management of patent foramen of Huschke, with temporoparietal fascia flap and total temporomandibular joint replacement. In that case patient was severe maloclusion defect and TMJ was lack of a posterior stop. In our case, patient had no maloclusion and defect were reduced by opening mouth.[3]

CONCLUSION

Otalgia can be due to non-otological reasons like temporomandibular joint diseases. Opening and closing mouth is useful in physical examination. By this way, physician gets a clue about TMJ diseases. In our case, full reduction of herniated mass from EAC and completely closing mouth, we think, should not have any surgical intervention. More studies should be discussed in this issue.

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A Custom-Made Nostril Retainer for Adult Population

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Abstract: Nostril retainers are used in cleft lip nose surgery in the post-operative period to maintain alar diameter and resistance against contraction. Various custom made splints were described in the literature to mimic this function when nostril retainers cannot be used for economic or logistic reasons. The authors designed a nostril retainer made by silicone urinary catheter for adult age patients which can be prepared easily. The splint can be used in both unilateral cleft lip nose surgery and operations in the alar wing of the nose.

Key Words: Cleft lip-nose deformity, nostril retainer, nostril splint

The benefits of nostril retainers are known to all plastic surgeons for the healing of the splayed nasal wing on the cleft side in the desired position, the resistance to tractional forces, and the provision of adequate nasal wing opening after a cleft lip repair

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