**CASE REPORT** 

# Chondroid syringoma of the external ear canal presenting as a cyst

Dış kulak yolunda kistik lezyon olarak görülen kondroid syringoma

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Chondroid syringoma of the external ear canal is a rare, usually firm or polypoid tumor, representing the cutaneous counterpart of pleomorphic adenoma of salivary glands. We report an very rare case of chondroid syringoma in a 40-year-old man, who presented with a fluid-containing cyst in the external ear canal. Clinical and radiological examinations showed involvement of the whole external canal to the annulus. The cystic lesion was totally excised along with the overlying skin. The postoperative course was uneventful.

*Key Words:* Adenoma, pleomorphic/pathology/surgery; ear canal/pathology; ear neoplasms; ear, external/pathology.

Dış kulak yolunun kondroid syringoması, tükürük bezlerinin pleomorfik adenomunun ciltteki karşılığı olan, nadir, genellikle sert veya polipoid yapıda bir tümördür. Bu yazıda, dış kulak yolunda, içi sıvı dolu bir kistle başvuran 40 yaşındaki bir erkek hastada görülen, oldukça nadir bir kondroid syringoma sunuldu. Klinik ve radyolojik incelemeler, lezyonun annulusa kadar tüm dış kulak yolunu doldurduğunu gösterdi. Kistik lezyonun tamamı üzerindeki ciltle birlikte çıkarıldı. Ameliyat sonrası dönemde herhangi bir sorunla karşılaşılmadı.

Anahtar Sözcükler: Adenom, pleomorfik/patoloji/cerrahi; kulak kanalı/patoloji; kulak neoplazileri; kulak, dış/patoloji.

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## CASE REPORT

A 40-year-old man presented with a painless, slowly growing lump in the left external ear canal, of a four-month history. Examination revealed a cystic mass arising from the posterosuperior wall of the left external ear canal, almost with total occlusion. Bilateral enlargement of the jugulodigastric lymph nodes was noted. There was no swelling of the parotid or submandibular salivary gland.

Fine-needle aspiration showed a straw-colored fluid with clumps and cytology showed irregular ovoid nuclei in a bland cytoplasm suggestive of an epithelial origin. Computed tomography showed a mass, 15x20x17 mm in size, filling the left external ear canal to the tympanic membrane (Fig. 1). The

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*Fig.* **1** - *A* CT scan showing a soft tissue mass in the left external auditory canal.

middle ear and the bony labyrinth appeared normal.

Intraoperatively, a cystic lesion was found to occupy the whole external canal to the annulus. The cyst was excised along with the overlying skin and a bony meatoplasty was carried out. The posterior wall of the external auditory canal was lined with a temporalis fascia graft and covered by the remnant of the canal wall skin. The postoperative course was uneventful with no recurrence during months.

Macroscopically, the tumor was partly cystic and firm. The larger cystic component was thin-walled and contained a straw-colored fluid. The solid element was firm and consistent with a smooth, off white cut surface. Microscopically, the tumor had a biphasic appearance with epithelial and stromal element cells (Fig. 2, 3).

### DISCUSSION

External ear canal masses, benign or malignant, may arise from any of the tissues present in the meatus, including the sebaceous and ceruminous glands. Hidradenomas and hidradenocarcinomas arise from the latter. Squamous cell carcinoma is a commonly encountered neoplasm, usually in a patient with chronic suppurative otitis media. Sebaceous adenoma and ceruminoma are benign neoplasms that require a wide local excision because of their tendency to recur. The majority of these tumors present as solid or polypoid masses; however, a cystic component may be seen, as in our case, as a rare tumor such as chondroid syringoma.

Mixed tumors arising in the external ear canal are the rare forms of ceruminous tumors.<sup>[1]</sup> These have been described as pleomorphic adenomas or chondroid syringomas, which represent the cutaneous counterpart of pleomorphic adenoma of salivary glands. It is debatable whether pleomorphic adenomas of the external auditory canal are derived from ceruminous or ectopic salivary gland tissue.<sup>[2,3]</sup> However, recently, the balance appears to have tilted in favor of the latter origin.



*Fig.* 2 - *Tubular structures lined by epithelium in a chondromyxoid stroma (H-E x 4).* 



*Fig.* 3 - *Immunohistochemistry staining for smooth muscle actin showing the myoepithelial layer in tubular structures (x 25).* 

Chondroid syringoma or pleomorphic adenoma of the skin is a rare tumor, but has been reported in various sites in the head and neck, including the scalp, eyelids, nose, cheeks, upper lips, and the external ear canal. Chondroid syringomas are extremely rare. They have been described as firm, rubbery or polypoid.<sup>[2]</sup> A cystic clinical presentation has not been previously described. Surgical resection with an adequate margin of normal tissue is the definitive treatment.<sup>[4]</sup> A skin graft may be necessary to close the defect;<sup>[2,5]</sup> therefore, early removal is preferable to prevent loss of excessive skin.

Although cysts in the external ear canal are usually presumed to be sebaceous cysts, this case highlights the possibility of a rare tumor such as chondroid syringoma underlying the cystic mass. Early removal is preferable because a large defect may complicate surgical reconstruction in the meatus.

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