

ANGIOFIBROMA OF THE EXTERNAL AUDITORY CANAL: A CLINIC CASE

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Abstract

Angiofibromas mostly affect the nasopharynx and account for less than 1% of all head and neck tumors. Rarer are extra-nasopharyngeal angiofibromas. Surprisingly, there has only been one incidence of the external auditory canal being located. We report a case of angiofibroma in this unusual site in a female patient who had hypoacusis and right ear fullness for six months. A mass connected to the posterosuperior wall of the right external auditory canal was discovered during the clinical examination. An average of 37.5 dB of right conductive hearing loss was found during preoperative audiometry. On the left external auditory canal, a mass was discovered using a computed tomography scan. The mass was surgically removed, and the diagnosis was validated by the histological evaluation. Following surgery, audiometry revealed improved hearing. No recurrence occurred.

Keywords: Angiofibroma, external auditory canal, extranasopharyngeal angiofibroma.

Introduction

Benign tumors and tumor-like formations can usually be removed endaurally. Expansion of the ear canal or its resection from a postauricular incision is used much less frequently. New growths in the cartilaginous part of the external auditory canal are most often removed with the perichondrium under local anesthesia.

Clinic Findings

Patient, born in 2018, was admitted on 11.02.23 with complaints of ear formation, decreased hearing, and bleeding. She does not associate the disease with anything.





Fig.1. Patient N, has a Glomus Angioma of the external auditory canal.

From the history, she has been ill for five months. She was treated locally for the condition, but as there was no improvement, she sought treatment at the ENT department of the SaM MI clinic. On otoscopy, the auricle and nipple-like protrusion are painless upon palpation. There are voluminous formations in the external auditory canal measuring 2x1.8 cm, dark crimson in color, bleeding, and soft in consistency. No middle ear involvement is visible. There is no pathology in other ENT organs. The patient underwent clinical-laboratory studies: X-ray of the left temporal bone. No destruction was found. The patient was diagnosed with Glomus Angiofibroma. Surgery was recommended, and the tumor was removed through an endaural external approach.

Stages of the operation

After anesthesia, we make an incision in the skin and perichondrium along the outer edge of the tumor, moving away from it by 2-3 mm. Using a periosteal elevator, we separate the perichondrium of the affected wall of the external auditory canal, taking into account the extent of the tumor along this wall. Despite the fact that the wound healed by primary intention, through granulation of the wound surface, there was no narrowing of the external auditory canal in any of the observations. We have found that if a strip of skin remains along the external auditory canal after the removal of the tumor, at least on one of the walls with a width of at least 1/3 of the circumference of the lumen, then narrowing, let alone obliteration, usually does not occur.

The excised tumor was sent for histological examination. Histological analysis showed thin, dilated arteries suggestive of angiofibroma and spindle cells with little atypia. There was no immunohistochemistry available. After a year, there was no recurrence.



Conclusion

In the head and neck areas, angiofibromas are extremely uncommon. They are still even less common when seen in the external auditory canal. After complete excision, a histological evaluation of the surgical specimen is necessary for a conclusive diagnosis. These tumors have a good prognosis because they are benign. Because of the risk of bleeding, biopsies performed without first undergoing imaging are highly discouraged.

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