

Balloon dilatation of the Eustachian tube: domain of an otologist or rhinologist?

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Background: Eustachian tube dysfunction is common in the general population, occurring in at least 1% of adults. Patients typically present with complaints of sensation of pressure or plugged ear, tinnitus, or hearing loss which can lead to an impaired quality of life. Eustachian tube balloon dilation is a novel surgical technique. The problem of treating Eustachian tube dysfunction with balloon dilatation is no clear consensus regarding patient selection and outcome assessment. Our case report aims to objectively measure the success of Eustachian tube balloon dilation by comparing pre and post-operative middle ear pressures using tympanometric testing.

Case report: A 27-year-old patient reported a feeling of fullness in his right ear that lasted for a year. He also complained of occasional tinnitus in the same ear. He had not had frequent ear infections until then. Audiological processing determined a normal hearing threshold on both sides at the level of 10 dB, type C curve in the right ear, and the test of tube function by swallowing on the right side showed dysfunction. After the treatment, balloon dilatation of the tube was performed on the right transnasal approach under a pressure of 6 daPa, six months postoperatively, the patient no longer complained, and there was a regular test of Eustachian tube function on both sides.

Conclusion: According to data from literature, balloon dilatation of the Eustachian tube showed success in 78% of patients. The transnasal approach to dilatation has proven to be a safe and effective method of treating chronic obstructive Eustachian tube dysfunction. A further consensus of patient selection and standardization of technique is required to optimize the effect of this therapy. The cooperation of otologists and rhinologists is needed in the diagnosis and treatment.

Keywords: Eustachian tube, Eustachian tube balloon dilation, balloon dilation, Eustachian tube dysfunction