Section 3: Surgical Treatment

Introduction

by

D. BRACKMANN: Many of the surgeons in the group will relate to an experience that I had as a junior medical student, when the chief of general surgery said: "Never forget that a chance to cut is a chance to cure". That is often the case. The question we are going to address this afternoon is: is the chance to cut in the case of tinnitus a chance to cure, or is it not? Perhaps nowhere in our field is that more true than in the field of otosclerosis. You will get a good hearing result in the great majority of patients with otosclerosis. The question is: what effect does that have on tinnitus?

Translabyrinthine nerve section: effect on tinnitus

by

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Abstract

The effect on tinnitus in 110 patients undergoing translabyrinthine vestibular nerve section is presented. The effect on tinnitus of vestibular and cochlear nerve section (VCNS) together and vestibular nerve section (VNS) alone was studied. The number of patients improved with VCNS (61 per cent) was slightly better than with VNS alone (49 per cent). VNS alone worsened tinnitus more often than VCNS. Age, side involved, sex, etiology of vertigo, severity of tinnitus, interference with sleep and activities, slope of the pre-operative audiogram, and magnitude of the hearing loss had no value in predicting the change in tinnitus following either VNS or VCNS.

Patients undergoing translabyrinthine nerve section for vertigo frequently have tinnitus as a secondary complaint. In these patients the surgeon must decide whether to section the cochlear nerve in an attempt to improve tinnitus. The benefit of cochlear nerve section in relief of tinnitus is unclear. Information in the literature does not specify the individual effect of vestibular and cochlear nerve section on tinnitus. The purpose of this study is to examine the effect of cochlear nerve section on tinnitus in a large group of patients undergoing translabyrinthine vestibular nerve section (TLVNS). This type of surgery provides a unique opportunity to study the effect of nerve sections on tinnitus. The following questions are addressed:

(1) Does section of the cochlear nerve combined with section of the superior and inferior vestibular nerves (VCNS) give better control of tinnitus than section of both vestibular nerves alone (VNS)?

(2) Is the risk of increasing tinnitus more in cochlear nerve section (VCNS) than in vestibular nerve section (VNS) alone?

(3) What is the effect of vestibular and cochlear nerve section on tinnitus in the opposite ear?

(4) Does the effect on tinnitus vary depend-

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** From the Otologic Medical Group, Inc., Los Angeles, California.

Study supported by the House Ear Institute, Los Angeles, California, an affiliate of the University of Southern California School of Medicine.

https://doi.org/10.1017/S1755146300090636 Published online by Cambridge University Press