Enlarged Vestibular Aqueduct Causing Right Sided Conductive Hearing Loss and with Superior Semicircular Canal Dehiscence in Contralateral Ear

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INTRODUCTION

Enlarged Vestibular Aqueduct (EVA) is the most common inner ear malformation associated with sensory hearing loss. EVA is associated with both syndromic and non-syndromic hearing loss. EVA associated with non-syndromic hearing loss usually unilateral. Hearing loss is usually sensorineural however it can be conductive or mixed, and the loss may be stable or fluctuating. Third window abnormalities are defects in the integrity of the bony structure of the inner ear, classically producing sound-pressure-induced vertigo (Tullio and Hennebert signs) and/or a low-frequency air-bone gap by audiometry. Both EVA and superior canal dehiscence ear malformations can act as a mobile third window.

CONCLUSIONS

Enlarged vestibular aqueduct abnormality can present in adulthood and mimic other more common ear pathologies such as otosclerosis. In patients who undergo middle ear exploration and are found to have mobile intact ossicular chain. CT temporal bone should be performed to evaluate for possible enlarged vestibular aqueduct as the cause of the conductive hearing loss.

REFERENCES

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