

Dilated Vestibular Aqueduct

Joseph Junewick, MD FACR

07/01/2009

History

8 month old female with hearing loss.

Diagnosis

Dilated Vestibular Aqueduct

Discussion

Dilated vestibular aqueduct is a common etiology of neurosensory hearing loss. It is diagnosed when the transverse diameter is greater than or equal to 1.5 mm.

Vestibular aqueduct enlargement is related to abnormal development of the endolymphatic duct and sac. The vestibular aqueduct is an extension of the vestibular membranous labyrinth through the osseous vestibular aqueduct, ending in the endolymphatic sac between the 2 layers of dura along the petrous bone. Abnormalities of the membranous labyrinth are seen in most cases.

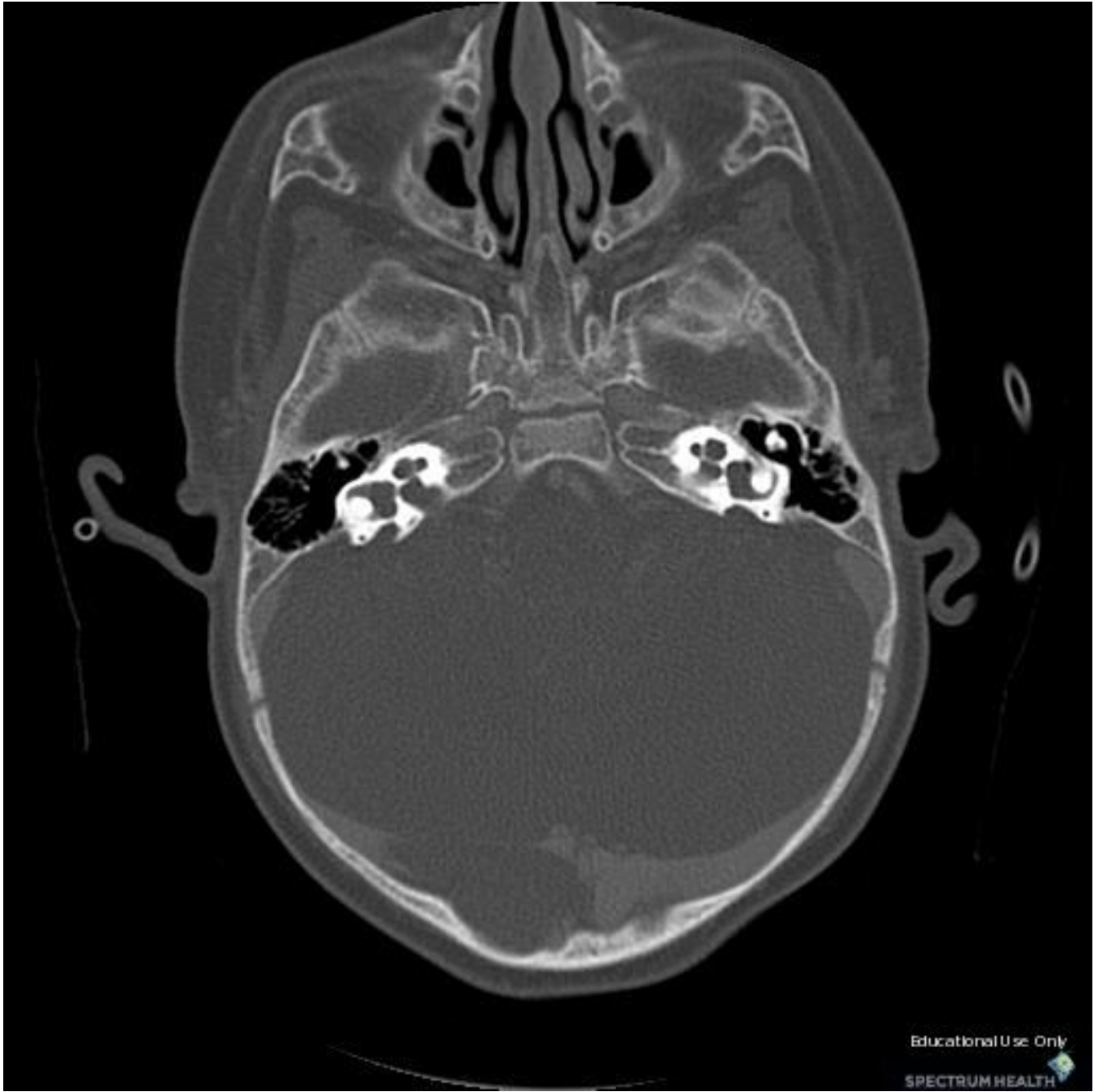
Occurrence of vestibular aqueduct enlargement is usually sporadic but can be associated with Pendred syndrome, CMV infection, branchio-oto-renal syndrome and CHARGE syndrome.

Findings

CT-dilated and funneled vestibular aqueducts

Reference

Vijayasekaranb S, Halsteda MJ, Boston M, et al. When Is the Vestibular Aqueduct Enlarged? A Statistical Analysis of the Normative Distribution of Vestibular Aqueduct Size. American Journal of Neuroradiology (2007); 28:1133-1138.



Educational Use Only

SPECTRUM HEALTH

Sponsored By



Disclaimer

This teaching site is partially funded by an educational grant from GE Healthcare and Advanced Radiology Services, PC. The material on this site is independently controlled by Advanced Radiology Services, PC, and GE Healthcare and Spectrum Health have no influence over the content of this site
Content Download Agreement

The cases and images on this website are owned by Spectrum Health. Permission is granted (for nonprofit educational purposes) to download and print materials to distribute for the purpose of facilitating the education of health professionals. The authors retain all rights to the material and users are requested to acknowledge the source of the material.

Site Disclaimer

This site is developed to reach healthcare professionals and medical students. Nothing this site should be considered medical advice.

Only your own doctor can help you make decisions about your medical care. If you have a specific medical question or are seeking medical care, please contact your physician.

The information in this website is provided for general medical education purposes only and is not meant to substitute for the independent medical judgment of a physician relative to diagnostic and treatment options of a specific medical condition.

The viewpoints expressed in these cases are those of the authors. They do not represent an endorsement. In no event will Advanced Radiology Associates, PC, Spectrum Health Hospitals (Helen DeVos Children's Hospital) or GE Healthcare be liable for any decision made or action taken in reliance upon the information provided through this website.