Teaching NeurolImage:

Prepontine-suprasellar arachnoid cyst presenting with signs of normal pressure hydrocephalus

P. De Bonis, MD
F. Novegno, MD
G. Tamburrini, MD
C. Anile, MD
A. Pompucci, MD
A. Mangiola, MD

Address correspondence and reprint requests to Dr. Federica Novegno, Institute of Neurosurgery, Catholic University School of Medicine, I.go A. Gemelli, 8 00168 Rome, Italy
federicanovegno@hotmail.it

A 64-year-old man was referred to us for suspected normal pressure hydrocephalus (NPH), according to the clinical history of gait disturbance and urge incontinence, and radiologic evidence of a supratentorial hydrocephalus, with enlarged pericephalic spaces (figure 1). A new MRI revealed a 4-cm prepontine arachnoid cyst (figure 2). An endoscopic ventriculo-cystostomy was performed with a prompt improvement of symptoms.

Eighty-five percent of prepontine arachnoid cysts occur in children; most of them present with acute/subacute signs of increased intracranial pressure. The possibility of diagnosing these lesions in adults has been reported; only two cases have been described in the elderly, none of whom had symptoms of NPH.^{1,2}

Figure 1 First MRI examination

The first MRI examination revealed the presence of supratentorial ventriculomegaly out of proportion to sulcal atrophy, rounded frontal horns, and transependymal CSF flow in the form of periventricular high signal on T2-weighted FLAIR images.

Figure 2 T2-weighted images

(A, B) Preoperative T2-weighted images revealing a space-occupying suprasellar prepontine arachnoid cyst (arrows), displacing superiorly the third ventricle floor, the pituitary stalk and the optic chiasm, and, posteriorly, the mammillary bodies. (C, D) Postoperative T2-weighted images demonstrating a more horizontal orientation of chiasm and third ventricle floor. The cyst has shrunk (arrows).

ACKNOWLEDGMENT

The authors thank Daniele Petricca for help with illustrations.

REFERENCES

1. Kandogan T, Olgun L, Gultekin G, Aydar L, Sezgin O. A suprasellar arachnoid cyst destructing sphenoid sinus: an unusual cause of headache in an elderly female. *Swiss Med Wkly* 2004;134:28–29.
2. Thompson TP, Levy EI, Jho HD, Lunsford LD. Primum non nocere: multimodality management strategies when multiple mass lesions strike a single patient. *Surg Neurol* 2001;55:332–339.

From the Institute of Neurosurgery, Catholic University School of Medicine, Rome, Italy.

Disclosure: The authors report no conflicts of interest.

Neurology®

Teaching NeuroImage: Prepontine-suprasellar arachnoid cyst presenting with signs of normal pressure hydrocephalus

P. De Bonis, F. Novegno, G. Tamburrini, et al.

Neurology 2008;70:e26

DOI 10.1212/01.wnl.0000296823.01603.44

This information is current as of February 4, 2008

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/70/6/e26.full
References	This article cites 2 articles, 0 of which you can access for free at: http://n.neurology.org/content/70/6/e26.full#ref-list-1
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): All Clinical Neurology http://n.neurology.org/cgi/collection/all_clinical_neurology Clinical neurology examination http://n.neurology.org/cgi/collection/clinical_neurology_examination MRI http://n.neurology.org/cgi/collection/mri
Permissions & Licensing	Information about reproducing this article in parts (figures,tables) or in its entirety can be found online at: http://www.neurology.org/about/about_the_journal#permissions
Reprints	Information about ordering reprints can be found online: http://n.neurology.org/subscribers/advertise

Neurology® is the official journal of the American Academy of Neurology. Published continuously since 1951, it is now a weekly with 48 issues per year. Copyright . All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.