Shunting to relieve the pressures of graduate school…literally

Vasvi Singh, Saurav Luthra, Michael DiSalle

DESCRIPTION

A 28-year-old woman with a history of hydrocephalus diagnosed as a part of amenorrhoea work-up at the age of 18, presented to her primary care doctor’s office with acute onset of neck pain, nausea and vomiting of 1-week duration. She also reported light-headedness with position change but no fever, chills or photophobia. Her vitals were stable except for a mildly elevated blood pressure.

While in the office she had a syncopal attack and an urgent CT of the head demonstrated massive non-communicating hydrocephalus (figure 1). She was admitted to the hospital and in the midst of her neurosurgical work-up she suffered a generalised seizure and underwent emergent ventriculoperitoneal (VP) shunt placement. Her symptoms improved significantly and she returned to graduate school within weeks and is on track to complete her masters in occupational therapy. Neurosurgery is monitoring her with periodic neuroimaging (figure 2).

Learning points

▸ Clinically, patients with intrinsic aqueductal stenosis commonly present with chronic symptoms such as delayed psychomotor development, difficulties in school, chronic headache and growth retardation. Acute presentations in the form of headache, nausea, vomiting and changes in mental status are rare in all age groups.

▸ Endocrine manifestations are found in about one-tenth of adolescents with aqueductal stenosis, likely secondary to chronic compression of the hypothalamic–pituitary axis. Men may be obese with features of precocious puberty, hypogonadism and diabetes insipidus. Women may present with obesity and amenorrhoea.

Figure 1  CT of the head without contrast at age 28. Severe hydrocephalus involving the lateral ventricles is noted and the cerebral sulci appear efeaced suggesting cerebral oedema.

Figure 2  MRI of the brain at age 28. Right-sided ventriculoperitoneal shunt catheter is noted. The lateral ventricles remain dilated but have mildly decreased in overall size. The effacement of cerebral sulci has markedly improved.

REFERENCES

