Spina Bifida & Hydrocephalus Association of Ontario

Hydrocephalus Fast Facts

Q: What is hydrocephalus?

A: Hydrocephalus comes from the Greek words "hydro" (water) and "cephalus" (head). It is a neurological condition that exists when excess cerebrospinal fluid (CSF) builds up in cavities, called ventricles, inside the brain. This happens when the body produces more CSF in a day than it can reabsorb, causing enlargement of the ventricles. Hydrocephalus can cause permanent brain damage and, in severe cases, death.

Q: Who can have hydrocephalus?

A: Hydrocephalus can develop in the womb or after birth. It can also develop as "acquired hydrocephalus" in children and young and middle-aged adults, and during the senior years, referred to as "adult onset hydrocephalus," in either the common form that involves high intracranial pressure or as normal pressure hydrocephalus (NPH).

Q: What causes hydrocephalus?

A: Hydrocephalus can occur at birth as a result of a congenital defect or complications associated with premature birth. It may be accompanied with spina bifida, aqueductal obstruction, arachnoid cysts or Dandy-Walker Syndrome. Acquired hydrocephalus can take place any time during a person's life as a result of intraventricular hemorrhage, meningitis, head injury, tumours or other unknown causes. About 80% of individuals with spina bifida also have hydrocephalus.

Q: How is NPH different from other forms of hydrocephalus?

A: NPH affects more than 1 in every 200 adults over the age of 55 and is neither a genetic nor an inherited condition. It is often misdiagnosed as Alzheimer's or Parkinson's disease. For information regarding symptoms, diagnosis and treatment, visit www.sbhao.on.ca.

Q: What are the symptoms of hydrocephalus?

A: Symptoms vary depending on age and can include head enlargement (in infants and toddlers), vomiting, seizures, impaired motor performance, visual disturbance and personality change. For a comprehensive list, visit www.sbhao.on.ca.

Q: How is hydrocephalus treated?

A: Treatment involves surgically implanting a shunt into the brain ventricles to drain away excess CSF or another surgical procedure called Endoscopic Third Ventriculostomy (ETV) that makes a small hole in the thinned floor of the third ventricle, allowing CSF to flow from the blocked ventricular system into the interpenducular cistern (a normal CSF space).

Q: Can hydrocephalus be cured?

A: No, unless it is the result of a brain tumour that can be removed and allow the CSF to flow.

For more information, visit www.sbhao.on.ca.