

# Ventriculoperitoneal (VP) Shunt for Hydrocephalus

Ventriculoperitoneal (VP) shunt surgery is the most common treatment for hydrocephalus. It is a neurosurgical procedure done to drain excess fluid (cerebrospinal fluid, or CSF) away from the brain.

*How does it work?* CSF is drained from the brain through a flexible silicon tube, called a shunt, to another part of the body (usually the abdominal cavity) where the reabsorption of this fluid can safely take place.

## YOUR SURGERY

### ■ Procedure and hospital stay

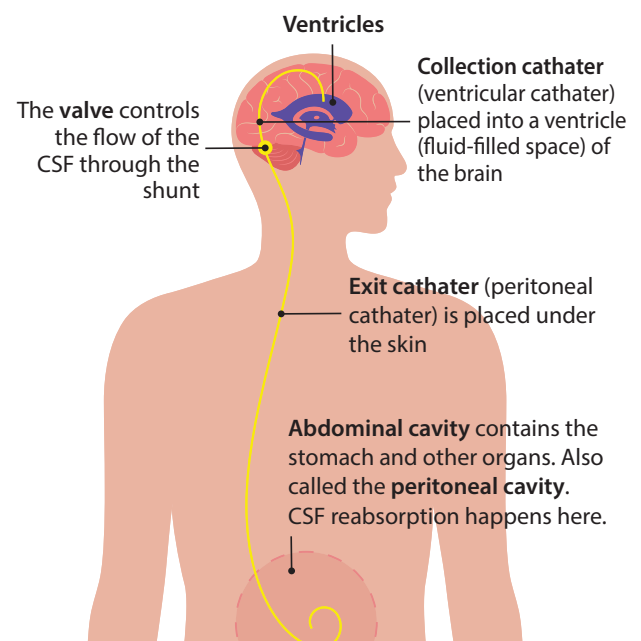
This procedure is done in the operating room under general anesthetic, which means you will be asleep during the operation.

An incision is made on the head and the abdomen. A small catheter is passed through a small hole in the skull and into a ventricle of the brain. The tubing of the shunt is threaded through the fatty tissue just under the skin, into the abdominal cavity. A programmable or nonprogrammable valve between the two catheters regulates the quantity of CSF removed.

On the average, this operation takes 2 hours to complete. It is a fairly common neurosurgical procedure.

### ■ Risks

The risks of this procedure will be explained to you before you sign your consent form. No surgery is absolutely safe and without risk. Possible risks of any surgery include bleeding, infection, or effects of anesthesia.



With a VP shunt in flows, CSF flows into the collection catheter and down the exit catheter, which shunts the fluid into the abdominal cavity.

## ■ Recovery

After surgery, the nurses will monitor your vital signs (pulse, respiration, temperature, blood pressure) closely for the first few hours while in the recovery room, and then routinely once you have been transferred to the neuro-surgical floor.

Shunt surgery usually involves minimal pain. Medications are available to ensure you are kept comfortable.

You will have a dressing on your head and a small dressing on your abdomen. These dressings will be changed before you are discharged home from the hospital. The sutures are removed after 10-14 days. The average length of stay in the hospital is from 2 to 4 days..

## ■ Complications

As with any surgery, complications are rare but can occur. Complications associated with this surgery may include:

- 1) Obstruction (blocking of the shunt tubing);
- 2) Infection;
- 3) Mechanical malfunction (breaking or dislocation of the shunt); and
- 4) Overdrainage of CSF.

Surgery to replace or repair the shunt may be required should one of these complications occur.

## ■ Expectations

The outcome of the surgery is usually extremely good. However, hydrocephalus may be associated with conditions, such as meningitis or a brain tumour, which influence prognosis and your long-term recovery to good health. A VP shunt does not cure these underlying diseases.

### Things to watch for when you go home

- Persistent nausea and vomiting
- Recurring headaches
- Redness, pain or swelling along the shunt tract or at the incision sites
- Fever greater than 38.5C
- Irritability or excessive sleepiness
- Balance, coordination problems, or weakness
- Vision problems (i.e., blurred or double vision)
- Personality changes

**If you experience any of these things, you should call your neurosurgeon's office.**

*This document is also available on the Neuro-Patient Resource Centre's website:*

**<https://www.mcgill.ca/infoneuro>**

**Important :** Information provided by this document is for educational purposes only. It is not intended to replace the advice or instruction of a professional healthcare practitioner, or to substitute medical care.

Contact a qualified healthcare practitioner if you have any questions concerning your care.

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