Ventriculostomy

What is a ventriculostomy?
A ventriculostomy is a device that drains excess cerebrospinal fluid from the head. It is also used to measure the pressure in the head (referred to as ICP, intracranial pressure). The system is made up of a small tube, drainage bag, and monitor. Sometimes the ventriculostomy is called a “ventric” for short.

Excess CSP and blood can build up in your head after brain surgery, a head injury, or a ruptured aneurysm. This can create extreme pressure on the brain. The fluid pushes against brain tissue and slows the blood flow. The brain needs a constant supply of oxygen and nutrients to work well. If your brain doesn’t receive enough oxygen and nutrients through the blood mental status may decline and brain tissue may be damaged. The ventriculostomy allows the healthcare team to drain off excess fluid.

How is a ventriculostomy placed?

The doctor will place the ventric either during surgery in the operating room or, hospital room. The procedure takes less than an hour and does not require general anesthesia. Medication will be used if needed to prevent pain. A small area of the head will be shaved and cleaned. A cloth drape will be placed over the head to keep the area sterile. After numbing the scalp, the doctor will make a small hole in the top of your head. Then, a narrow plastic tube will be placed into the ventricle of the brain. This tube is connected to a drainage bag and monitoring system, allowing the healthcare team to observe the head pressures and drain off excess fluid from the brain as needed. The tube will be held in place with some stitches. It may be covered with a dressing to keep it clean.
What can I expect?

Your nurse will:

- Check the drain
- Monitor the pressure.
- Drain off any extra fluid
- Adjust the position of the drain
- Check the dressing for leakage and signs of infection

The nurse will also do a neurological exam by asking questions; such as “stick out your tongue”, “hold up your arms” and “show your teeth”. While these questions and exercises may seem silly, they all provide the nurse with information about the function of your brain.

The doctor may draw fluid samples from the drain to send to the lab to test for infection. This is routine. If you get an infection, the doctor will treat you with antibiotics.

Do not touch your ventric while it is in place. Touching it may cause it to fall out, lead to infection, bleeding, or excessive drainage of fluid. Always ask the nurse to help with moving around, problems with the dressing, or itching at the site.

Do not allow family or others to adjust the bed’s position or touch your drain. Only the nurse or doctor may safely use your ventriculostomy. Never move the head of the bed up or down without help from the nurse. It could cause fluid to drain out of the head, causing a severe headache. The nurse needs to clamp the drain and adjust the level of the ventric whenever the position of the head is changed.

The doctor will decide when it’s safe to take the ventriculostomy out. When it’s time, the doctor will remove the stitches and carefully pull the tube out. It will not hurt and takes only a minute. A dressing will be placed over the site. The nurse will watch it for drainage and infection. Sometimes, a staple or two may be needed to keep the site from draining.

Talk to your healthcare team. Ask questions and express concerns about the drain. Talking with the doctor and nurse will give you a better understanding of both the ventric and the road to recovery.