Ommaya Reservoir

An Ommaya reservoir is a small plastic dome-shaped device (port) placed under the skin on your scalp (Figure 1). The port connects to a small tube. The tube leads to a fluid-filled chamber in your brain known as a ventricle. The ventricles make cerebrospinal fluid (CSF). CSF is a liquid that flows around your brain and spinal cord. CSF cushions and nourishes your brain.

If you have any questions, please ask your neurosurgeon or nurse.

Purpose of an Ommaya reservoir

An Ommaya reservoir can be used to:
- Place medication directly into the fluid of your brain and spinal cord
- Take a CSF sample to look for abnormal cells
- Measure the pressure in your brain
- Remove excess CSF from the ventricle
- Access a pocket of fluid in the brain that may need to be drained later

What to expect during the placement procedure

The neurosurgeon will insert the Ommaya reservoir in the operating room while you are asleep. Before surgery, the care team may shave your hair over the spot where the reservoir will go. The neurosurgeon will make an incision in the skin on your scalp. They will make a small opening in your skull. Then they will put a small tube inside the ventricle of your brain. The port will be connected to this tube. They will position the reservoir underneath your scalp and close the incision with sutures (stitches) or staples.
The procedure will take 1 to 2 hours. After surgery, you will have a computed tomography (CT) scan to make sure the Ommaya reservoir is in the correct position.

After the procedure

Most patients have only minor pain. Talk with your neurosurgeon or nurse about what pain medication you can take. You can go back to your normal activities as you are able.

Follow these instructions until the stitches are out and the incision is healed:

- **Keep your scalp incision dry.**
- Follow your neurosurgeon’s instructions for washing your hair.
- Avoid cigarettes, cigars, secondhand smoke and e-cigarettes. The nicotine in these products can delay healing.
- Avoid any injury to the area.

The care team will remove the stitches in 7 to 14 days.

Treatment using the Ommaya reservoir

First, your physician or nurse practitioner will feel for the reservoir. They will clean the skin around the Ommaya reservoir. They will put a small needle into the reservoir. If needed, they will use a syringe to take a small amount of CSF and send it to the lab for testing. If your physician has prescribed medication, they will inject the medication into the reservoir slowly over a few minutes. After they take the needle out, they will cover the area with a small bandage.

The entire process will take 5 to 10 minutes. When your reservoir is accessed for the first time, your care team may ask you to stay in the clinic for a few minutes. You may then sit, stand and do all normal activities, including washing your hair.

When to call your neurosurgeon or nurse

Call your care team if you have any of these symptoms:

- Soreness and redness at the reservoir site
- Drainage from the reservoir site
- A temperature more than 100.5 degrees F
- A stiff neck
- A headache with or without vomiting
- Blurred vision