PATIENT & CAREGIVER EDUCATION

Common Questions About Ommaya Reservoirs and Taps: Information for Children, Teens, and Young Adults

This information answers some common questions about Ommaya reservoirs (oh-MY-uh REH-zer-vwahrz) and Ommaya taps. In this resource, the words “you” and “your” mean you or your child.

About Ommaya reservoirs

What is an Ommaya reservoir?

An Ommaya reservoir is a soft, plastic, dome-shaped device that is placed under your scalp. It is about the size of a quarter. An Ommaya reservoir has 2 parts (see Figure 1).

- The **reservoir dome** sits on top of your skull, under your scalp. It has a space inside to hold liquid.
- The **catheter** is a thin, flexible tube connected to the dome. It is placed in one of the ventricles in your brain (see Figure 2).

Your ventricles are hollow spaces that make cerebrospinal (seh-REE-broh-SPY-nul) fluid. Cerebrospinal fluid is also called CSF. It is a clear liquid that flows in and around your brain and spinal cord. It acts as a cushion to protect your brain and spinal cord from getting hurt. CSF also brings nutrients to your brain cells and carries waste away from them.

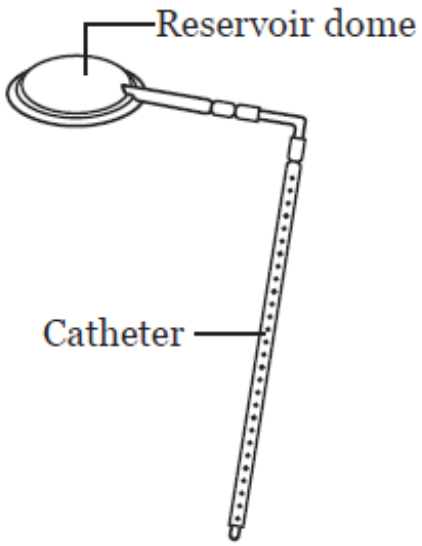


Figure 1. Ommaya reservoir

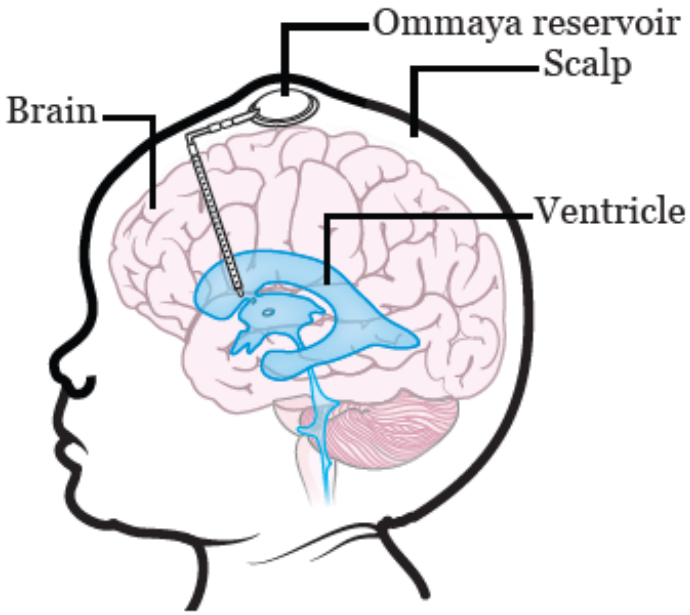


Figure 2. Placement of the Ommaya reservoir

Why do I need an Ommaya reservoir?

An Ommaya reservoir will help your healthcare provider:

- Take samples of your CSF. Your healthcare provider can check your CSF for cancer cells or infections.
- Put medicine into your CSF. They can put chemotherapy, antibiotics, and monoclonal antibodies

(a type of protein made in a lab that's used to treat some types of cancer) into your CSF through your Ommaya reservoir.

These procedures are called an **Ommaya reservoir tap**. You may need fewer spinal taps if you have an Ommaya reservoir.

How is an Ommaya reservoir placed?

Your Ommaya reservoir will be placed during a surgery. Your neurosurgeon will explain the details of your surgery. Your nurse will help you get ready and will give you a resource called *About Your Ommaya Reservoir Placement Surgery at MSK Kids* (www.mskcc.org/pe/ommaya-reservoir-surgery).

Will I have any side effects after my Ommaya reservoir is placed?

Most people do not have any side effects after their Ommaya reservoir placement surgery. You may feel a little bump on your head where the reservoir has been placed. You should not feel any pain.

Can my Ommaya reservoir be taken out?

Your Ommaya reservoir usually is not taken out unless you have problems with it. You will need another surgery to take out your reservoir. This can raise your risk of getting

an infection or having other problems.

Are there limits on my activities with an Ommaya reservoir?

- For at least 4 to 6 weeks after your Ommaya reservoir placement surgery, do not play any contact sports. Examples of contact sports are football, boxing, and wrestling. This gives your incision (surgical cut) time to heal.
- Talk with your neurosurgeon about when you can go back to gym class and play contact sports again. Remember to wear a helmet, if needed. This lowers your risk of hurting your head.
- If you accidently hit your head where your reservoir is, you may feel a little pain for a short time. You may also have a headache. Call your healthcare provider right away if you hit your head and have swelling around your reservoir.

How do I care for my Ommaya reservoir?

Your Ommaya reservoir does not need any special care. You can wash your hair as usual.

About Ommaya reservoir taps

Do I need to do anything to get ready for my Ommaya reservoir tap?

Tell your healthcare provider if you're allergic to iodine. Usually, we use the antiseptic povidone-iodine (Betadine®) to clean your skin before your Ommaya reservoir tap. An antiseptic is a liquid that kills bacteria and other germs. If you're allergic to iodine, your healthcare provider will use a different antiseptic.

You do not need to do anything else to get ready for your tap. You can eat, drink, and take your medicine as usual.

Some people may have another scan or procedure after their tap. If you're getting anesthesia, follow your healthcare provider's instructions about eating, drinking, and taking medicine. Anesthesia is medicine to make you sleep during a procedure.

What will happen during my Ommaya reservoir tap?

Your healthcare provider will tap your Ommaya reservoir in your exam room or hospital room. You will not need to get out of your bed.

Your healthcare provider will do the following during your Ommaya reservoir tap.

1. Your healthcare provider will gently feel your Ommaya reservoir. They will push down on it a few times to pump

it. This pulls some of your CSF up into the reservoir.

2. Your healthcare provider may ask you to lie on your back. They will clean your skin with an antiseptic.
3. They will put a small needle with tubing attached to it into your Ommaya reservoir (see Figure 3). You may feel a little discomfort when they do this. They will use the needle to take out a small amount of CSF. The CSF will flow through the needle and tubing into a syringe.
    - Your healthcare provider may send some of the CSF to a lab to check for cancer cells or infection.
    - If you're getting medicine during your tap, your healthcare provider may save some CSF in the syringe. They will use it to flush your Ommaya reservoir after they put the medicine in (see step 4).
4. If you're getting medicine during your tap, your healthcare provider will inject it slowly into your Ommaya reservoir. Then they will flush your reservoir with the CSF that was saved in the syringe. This helps push the medicine into your ventricles.
5. Your healthcare provider will take out the needle and apply gentle pressure with gauze for about 1 minute. This is to keep any CSF from leaking out. They may then cover the area with a bandage (Band-Aid®).

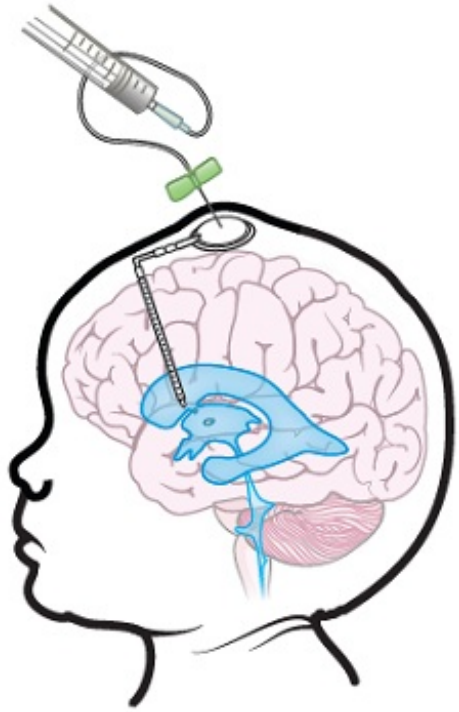


Figure 3. During an Ommaya reservoir tap

How long will my Ommaya reservoir tap take?

Ommaya reservoir taps usually take about 15 minutes.

When can I go back to my usual activities?

Ask your healthcare provider when you can go back to doing your usual activities. Most people can right away. This includes washing your hair. Your Ommaya reservoir will not need any special care.

When to call your healthcare provider

Call your healthcare provider if you have:

- A fever of 100.4 °F (38 °C) or higher.

- Tenderness, redness, or swelling around your reservoir.
- Clear, bloody, or pus-like discharge from your reservoir.
- Headaches.
- Vomiting (throwing up).
- Stiffness in your neck.
- Blurry vision.
- Confusion.

If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

Common Questions About Ommaya Reservoirs and Taps: Information for Children, Teens, and Young Adults - Last updated on July 3, 2024
All rights owned and reserved by Memorial Sloan Kettering Cancer Center