



PATIENT & CAREGIVER EDUCATION

Frequently Asked Questions About Ommaya Reservoirs and Ommaya Taps

This information answers some commonly asked questions about Ommaya reservoirs (oh-MY-uh REH-zer-vwahrz) and Ommaya taps.

About Ommaya Reservoirs

What is an Ommaya reservoir?

An Ommaya reservoir is a soft, plastic, dome-shaped device that's placed under your scalp. It's 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's 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 often called CSF. It's 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 injury. CSF also brings nutrients to your brain cells and carries waste products 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 medications into your CSF. Examples of medications are chemotherapy, antibiotics, and monoclonal antibodies (a type of protein made in a lab that's used to treat some types of cancer).

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 *Getting Ready for Surgery* (https://sandbox18.mskcc.org/pe/getting_ready_surgery).

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

Most people don't 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. This shouldn't cause you any pain.

Can my Ommaya reservoir be taken out?

Your Ommaya reservoir usually isn't taken out unless you have problems with it. You'll 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 6 weeks after your Ommaya reservoir placement surgery, don't 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 play contact sports again. Remember to wear a helmet, if needed. This lowers your risk of getting a head injury.

If you accidentally hit your head where your reservoir is, you may feel a little pain for a short time. You may also have a headache. If you hit your head and have swelling around your reservoir, call your healthcare provider right away.

How do I care for my Ommaya reservoir?

Your Ommaya reservoir doesn't 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 don't need to do anything else to get ready for your tap. You can eat, drink, and take your medications as usual.

What will happen during my Ommaya reservoir tap?

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

1. Your healthcare provider will gently feel your Ommaya reservoir. They'll push down on it a few times to pump it. This pulls some of your CSF up into the reservoir. 
Figure 3. During an Ommaya reservoir tap
2. Your healthcare provider may ask you to lie on your back if you aren't already. They'll clean your skin with an antiseptic.
3. Your healthcare provider will put a small needle with tubing attached to it into your Ommaya reservoir (see Figure 3). You might feel a little discomfort when they do this. They'll 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 your care plan requires you to get medication, your healthcare provider may save some CSF in the syringe. They'll use it to flush your Ommaya reservoir after they put the medication in (see step 4).

4. If you're getting medication during your tap, your healthcare provider will inject it slowly into your Ommaya reservoir. Then they'll flush your reservoir with the CSF that was saved in the syringe. This helps push the medication 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®).

How long will my Ommaya reservoir tap take?

Ommaya reservoir taps usually take about 15 minutes.

When can I go back to my regular activities?

Ask your healthcare provider when you can go back to doing your regular activities. Most people can right away. This includes washing your hair. Your Ommaya reservoir won't 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)
- Neck stiffness
- Blurry vision
- Confusion

If you have any questions, contact a member of your care team directly. If you're a patient at MSK and you need to reach a provider after 5 p.m., during the weekend, or on a holiday, call 212-639-2000.

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

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