

# About an Ommaya Reservoir: Information for Parents



## Neurosciences Department

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## What is an Ommaya Reservoir?

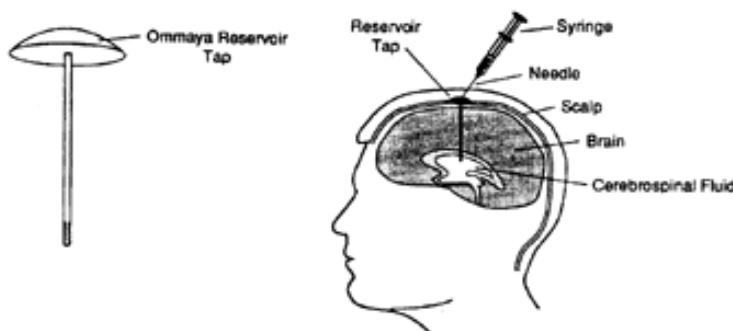
An Ommaya reservoir is used to put fluids into or out from areas in the brain or spinal cord.

### ***It has two parts:***

1. a small dome shaped container that is put under the scalp or spine.
2. a small tube leading off from the dome. This tube is also called a catheter.

The end of the tube may be put into:

- A cyst in the brain or spinal cord
- One of the 4 spaces in the brain called "ventricles". In the ventricles is a fluid called Cerebral Spinal Fluid (CSF). The CSF flows around the brain and spinal cord to cushion and protect them. CSF also has nutrients that feed the brain.
- The space in which CSF flows around the spinal cord which is called the subarachnoid space.



## How is it used?

The Ommaya reservoir is used:

- To give medications, such as chemotherapy drugs, directly into the CSF. This is a way to bathe brain or spinal cord tumours in the medication. It is a powerful way to give chemotherapy that can work very well.

- To keep draining brain cysts that cannot be removed surgically and treating them with medications.
- To take samples of CSF for testing.

Its main use is not to drain fluids that are causing on-going pressure in the brain. Its use is not like a shunt.

**Note:** Before putting medications into the brain or spinal cord, some CSF may be taken out. For example, if 5ml of medication is going in then 5ml of CSF will be taken out. This is done so that medicine going in does not increase pressure in the skull.

## How is an Ommaya Reservoir put in?

Your child will have surgery. The surgeon positions the Ommaya reservoir under the scalp or into the spine and makes a small hole through the skull or into the spine for the tubing. The doctor then guides the tube into position.

The doctor will discuss the risks and benefits of this form of treatment with you. If you agree to go ahead with it, you will be asked to sign consent. Signing the consent means that you understand the purpose of the treatment and its risks and benefits for your child. Discuss any concerns with the doctor. Make sure you have all of the information you need in order to make an informed decision. After you sign the consent the surgeon will schedule the time for the surgery.

## How is the Ommaya Reservoir used?

The Ommaya Reservoir can be used as soon as it is in place. The doctor will discuss the treatment plan with you.

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Treatments can be done on an outpatient basis in the clinic. While the treatment itself takes about 15 minutes, allow at least 30 to 60 minutes for each visit. Ask your doctor how long to expect each treatment to take.

Chemotherapy drugs are put into the dome container by the doctor. Every effort is made to keep the area free of germs. The doctor cleans the skin over the reservoir with an antiseptic and then inserts a needle into the dome. Your child may feel a slight prick like a 'bee-sting' when the needle goes in.

The doctor may take a little CSF out for testing and to check that the tubing is in the right place.

The doctor might also remove some CSF to make space and then inject the medication and remove the needle. The doctor presses the dome up and down or pumps it to push the medication through the tube into the target space.

Sometimes the doctor covers the injection site with a small Band-Aid.

## After the treatments

The nurse will check your child closely to make sure that all is well. The nurse will watch for complications such as infection, side effects of the medication and a change in your child's behaviour or altered neurological status, such as being very tired and lethargic, irritable etc.

Your child can do whatever activities she or he feels like after the treatment. But, sometimes children have a headache for a day or two and may not feel like doing too much. Your doctor or nurse can advise you what to do for this type of headache.

The doctor may teach you how to pump' the reservoir to prevent it from blocking. Only pump the reservoir if your doctor asks you to and has showed you how.

## Caring for the child after the surgery.

Children are cared for in hospital for at least 24 to 48 hours after surgery to place an Ommaya reservoir. They must be carefully checked often.

### Checking for early signs of nerve damage.

The nurse will be waking your child every few hours to make sure there are no signs of bleeding into the brain or spinal cord, pressure on nerves, or CSF leaking. Please let the nurse know about any changes in your child's behaviour. These may be important. You know your child best and may be the first to see small changes. We respect your opinion about what you observe.

### Keeping the wound and the tubing free from infection.

- The wound is closed with staples or stitches. The wound may be covered with a bandage or dressing for the first 24 hours and then left open to the air unless the doctor wants to keep it covered.

The nurse will check to see that the wound is healing well.

- Wash your child's hair 48 hours after the surgery. The nurse may do the first shampoo with a soap that kills germs called Chlorhexidine. At home, wash the hair daily with a gentle shampoo. If your child has dissolvable stitches, rub the wound with a clean washcloth during the shampoo.
- Brief showers are best until the staples or sutures are out.
- Don't rub any cream around the wound unless the doctor has asked you to treat the area with a specific ointment.
- Do not soak the wound in a bath, or allow your child to swim, for at least two weeks after surgery. Check with your doctor when your child can soak her or his head in the tub or swim.

## **Check your child and the wound for these signs of infection:**

- Redness, swelling and pain
- Clear, bloody or pus-like discharge
- Sores or spots on the skin
- Wound opening so you see the reservoir
- Fever
- Headache or pain in the back or tummy
- Behaviour changes such as tiredness, lack of interest in things, crankiness.

If your child has any of these signs, contact your doctor. If your child is very ill, please go at once to an Emergency Room.

## **Removing the stitches.**

Your nurse will tell you when the stitches should be taken out. It is usually 10-14 days after the surgery. You will need to return to your doctor's office to have the stitches removed. If the surgeon has used dissolvable stitches they do not need to be removed.

## **Protecting the reservoir**

The reservoir is protected by the skin. It is safe, unless it gets a hard bump and/or breaks. If this happens it can cause internal bleeding. Talk to your doctor, before you go home, about what activities and sports may be dangerous for your child.

It is always best to have your child checked by a doctor if you think that the reservoir may be damaged.



## **Contact Numbers:**

Clinic Nurse: \_\_\_\_\_

Doctor: \_\_\_\_\_

Clinic Number: \_\_\_\_\_

**It's good to ask!**

At Children's & Women's Health Centre of British Columbia we believe parents are partners on the health care team.

We want you to be as informed as possible. This brochure will answer some of your questions.

Please ask about things you do not understand and share your concerns.

If you have any questions, please call : 604-875-2345 local 7678