

Reducing pressure in the skull with a drain

External ventricular drain



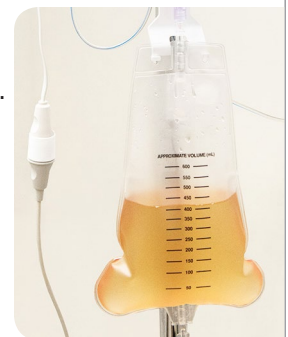
A drain will be installed in the skull of your loved one. This fact sheet tells you how this is done and the precautions to be taken to make sure everything goes well.

What is an external ventricular drain (EVD)?

The brain and spinal cord are surrounded and protected by a fluid called the cerebrospinal fluid. This fluid absorbs movements and shocks. It also brings nutrients to the brain and helps to carry away other elements.

Normally, this fluid comes out of the brain in a natural way. But if there is a blockage and the fluid does not come out, the pressure increases in the skull.

The external ventricular drain (EVD) is a small tube that goes into the skull through a small hole. It is used to remove excess fluid when there is too much. The fluid is drained into a reservoir.

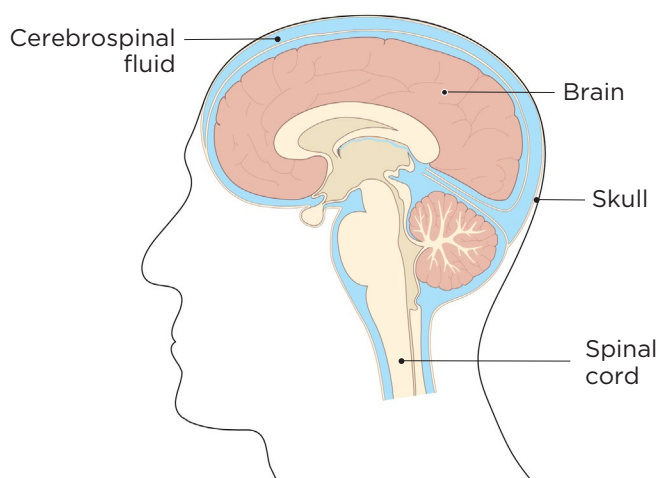


Why does my loved one need a drain?

The drain is needed because there is too much cerebrospinal fluid in the skull. Too much fluid puts pressure on the brain. This can cause several symptoms, including:

- decreased consciousness: your loved one is slowed down, disoriented, drowsy, comatose, and non-responsive
- headache
- projectile vomiting
- reduced muscle strength
- paralysis (being unable to move)
- blurred vision and dilated pupil on one side
- convulsions

Protection of the brain



High pressure in the skull can be caused by:

- a tumour
- a blood clot
- an infection
- bleeding
- a head injury

The drain reduces pressure in the skull and helps antibiotics to work better in cases of infection.

Can there be complications?

As with any operation, there is a risk of bleeding and infection. Measures will be taken to reduce these risks.

Is it possible to avoid installing a drain?

No, because there is no effective medication against the build-up of cerebrospinal fluid. But the drain helps relieve the symptoms.

How much time does the operation take?

It takes 45 to 60 minutes. Your loved one will remain in the recovery room for an hour or two before being moved to a hospital room.

What steps are involved in installing the drain?

> Before the installation

The doctor will explain the procedure to you. He or she will also talk to you about the risks and how they will be monitored and treated, if necessary. You will be asked to sign a consent form.



> Installing the drain

The head will be partly shaved. The doctor will make a small hole in the skull and will insert the drain. Then the skin will be closed with staples. Your loved one might be sent for a CT scan after the drain is inserted to make sure it's properly positioned in the skull.



Once the drain is in place, you will be able to help your loved one in the hospital and at home, so that everything goes well. See the fact sheet [*Looking after a loved one with a cranial drain.*](#)

When will the drain be removed?

The drain stays in place for 10 to 14 days. It depends on why it was inserted and on your loved one's health condition.

Sometimes the drain may need to be replaced or some other type of drain may be required. If this happens, the care team will discuss it with you.

Who should I contact for help or to ask questions?

While your loved one is in the hospital:

The surgeon, nurse, or care team are the people who can best answer your questions.



When you are at home:

Contact the doctor or follow-up nurse.

Tel:



USEFUL RESOURCES

Other health sheets published by the CHUM are available. Ask for those that might fit your situation.



You can also find them on our web site chumontreal.qc.ca/fiches-sante



NOTEPAD



Questions

Write down any questions you want to ask your care team so you don't forget anything.



The content of this document in no way replaces the recommendations and diagnoses made, or the treatment suggested by your health professional.

To find out more about the Centre hospitalier de l'Université de Montréal chumontreal.qc.ca

