WHAT IS A VENTRICULAR RESERVOIR?

This is a small domed capsule that connects to the ventricle by a long tube (catheter). The Reservoir has no valve so that the fluid from inside the brain can wash in and out. A needle is pushed through the skin into the reservoir to gain access.

WHY IS A VENTRICULAR RESERVOIR INSERTED?

The fluid filled cavities in the middle of the brain (ventricles) produce a fluid called cerebrospinal fluid (C.S.F.). This washes the brain and the brain floats in it. The C.S.F. is normally absorbed after it travels through the middle of the brain and over the surface of the brain. Sometimes continuous access is needed to this fluid. Rather than place a needle into it each time a special port is created. Access may be needed to treat:

- Infection (Meningitis) with antibiotics
- Tumours with Chemotherapy
- Remove blood from the brain

WHAT YOU NEED TO TELL THE DOCTOR BEFORE SURGERY?

- If you have clotting problems.
- Any recent new Health problems.
- If you are taking blood thining agents e.g. Warfarin/aspirin/anti-inflammatory Drug or other allergies

HOW IS IT PERFORMED?

In the operating theatre you are given a general anaesthetic. The area of the incision on the head is then shaved and prepared with anti-septic. The incision is made in such a way that the area the needle is injected into is made permanently numb by the surgery. You are covered in drapes so that only the incision can be seen. Local anaesthetic is injected and then the skin is cut. A hole in the bone of the skull is drilled down to the dura.

A small hole is made in the dura and brain and we push a blunt catheter through the brain down to the ventricles. The catheter is connected to the reservoir. Once inserted all bleeding is stopped. Everything is then repositioned the way we found it. The skin is then closed either with nylon suture or with special staples.
WHAT HAPPENS NEXT?
You will wake up in recovery and after about 1 hour you will be transferred to the ward. The nursing staff will be continually checking your pulse/blood pressure/limb strengths and level of alertness looking for any changes to indicate a complication. During the first night on the ward you will be woken for these observations. You will have intramuscular and oral analgesia. Operations on the head do not often hurt much. Sometimes you will have difficulty passing water and you may require a catheter (this may have been inserted for the operation).

Usually the day after surgery the drip in your arm will be removed. The first day after surgery you will be encouraged to go for a walk. Gradually over the next two days you will be able to get around as normal. When you are comfortable you will be able to go home. You may have a repeat scan of your head before going home. Commonly you will have a headache for a while after the operation. The sutures are usually removed about 5 - 10 days after the surgery.

WHAT HAPPENS WHEN YOU GO HOME?

You may be tired
It is common to require a rest in the afternoon
You may have intermittent headaches.
They will all improve with time.
You will not be able to drive for 3 months.
You will be reviewed at 4 - 6 weeks post operatively.
The reservoir can be used almost immediately.

WHAT ARE THE RISKS?

Discuss these and others with your surgeon

THE COMMON RISKS ARE
Blockage
Infection
Post operative blood clot requiring drainage.
Stoke from the catheter damaging the brain.
Seizure
Death (rare)
Clot in the legs (can travel to the lungs uncommon)
Complication not related directly to the surgery e.g. Pneumonia Heart attack Urine infection

WHAT YOU SHOULD NOTIFY YOUR DOCTOR OF AFTER SURGERY

Increasing Headache
Fever
Fitting
Swelling or infection in the wound.
Fluid leaking from the wound.
Weakness or numbness
Drowsiness
Worsening Balance

COULD THE RESERVOIR EVER STOP WORKING?
YES The catheter in the brain or abdomen may block with tissue.

DOES IT NEED TO BE REMOVED WHEN NO LONGER NEEDED?

Normally we would leave it alone as removal has risks.

WHAT HAPPENS IF IT GETS INFECTED?

The doctor may notice that the fluid is changing, and this will be a clue. Usually the symptoms are related to the meningitis that you will develop

Headache
Vomiting/nausea
Mental deterioration
Fits
Temperature

IF YOU THINK YOUR RESERVOIR IS INFECTED YOU MUST CONTACT YOUR SURGEON OR HOSPITAL URGENTLY.

YOU WILL BE ASKED TO SIGN A CONSENT FORM TO SAY THAT YOU UNDERSTAND THE RISKS. IF YOU ARE NOT SURE ASK BEFORE YOU SIGN.