

## Department of Neurosurgery

### Patient information

## Ventricular-peritoneal shunt

**This leaflet is for patients with hydrocephalus who are going to have a Ventricular-peritoneal shunt, VP shunt, inserted. It tells you about the operation you are going to have and about its risks and benefits. It also tells you what to do if you have any questions or worries.**

### **What is a VP shunt and why do I need one?**

Hydrocephalus-commonly known as water on the brain- is caused by the brain making too much cerebrospinal fluid, or CSF. It can also be caused by a blockage in the brain obstructing the flow of CSF. If it is caused by a blockage this may be removed by surgery. The reason for your hydrocephalus will have been explained to you by your consultant surgeon. To prevent further CSF build up you need an operation to insert a VP shunt.

A VP shunt is a device made up of tubing and a valve. The valve opens when extra pressure builds up in the brain. The excess fluid is safely drained through tubes behind the ear, down the neck and chest and into the abdominal cavity where it is safely absorbed. This is the only way to relieve a build up of CSF. Some shunts can be programmed externally to drain more or less fluid. Your surgeon will have discussed which is the best device for your treatment.

### **What preparation do I need?**

You will have a preoperative assessment before your admission. This will include a physical examination and blood tests. You may also have an electrocardiogram-ECG-and a chest x-ray. If you smoke, we strongly

advise you to stop as this will help your recovery as well as your general health. We can offer support and information about stopping smoking.

We will advise which medications you need to stop before surgery.

We may admit you into hospital on the morning of your operation. If you have several other medical problems we may ask you to come in the day before your surgery.

## **What happens on the day of my operation?**

The nurse will tell you when to stop eating and drinking before your operation. You will be able to take your usual medication unless otherwise instructed.

You will be given a hospital gown to wear and anti-embolism stockings.

These are special stockings which help prevent a deep vein thrombosis-DVT-developing in your legs. This is a blood clot that can sometimes form in the veins of the legs due to prolonged lack of movement.

Your consultant surgeon or a senior member of their team will come and see you to talk to you about your operation, including any side effects or complications. They will give you a form to sign which means you give your consent to have this procedure. Your surgeon will also sign this form.

An anaesthetist will also see you. An anaesthetist is a specialist doctor who is responsible for giving you your anaesthetic and caring for you throughout your operation. You can ask any questions that you might have.

## **What does the operation involve?**

When you have been anaesthetised a small amount of hair is shaved from your scalp. The surgeon or a member of his team will:

- clean this area of your head
- drill a hole into your skull and make a small incision-cut-in your abdomen
- pass a fine tube into your brain and attach the shunt to this
- close your wounds with metal clips.

## **What happens after your operation?**

When you wake up after your operation you will be in the recovery unit or intensive care unit. You will be cared for by a nurse experienced in caring for patients who have had brain surgery.

You will have an intravenous infusion. This enables us to give you fluids, usually saline, into a vein in your arm. This will be removed by a nurse when you feel able to eat and drink normally, usually the same or next day.

You will wear an oxygen mask until you have fully recovered from your anaesthetic, usually after a few hours.

You may have to lie flat for 24 hours but will be encouraged to mobilise- move about- as soon as your surgeon advises.

We will give you painkillers as it is normal to experience wound pain.

You will have two wounds; one in your stomach and one in your head. The clips are usually removed five days after surgery for the head wound and seven days for the stomach wound. Do not get your wounds wet until after the clips have been removed.

If you are discharged before your clips are removed the discharge planning nurse will arrange with your GP for you to have your clips removed there.

## **When will I go home?**

You will be in hospital for approximately five days. A senior nurse will discharge you from the ward and you will be ready to go home some time after midday.

We may ask you to vacate your bed space by 10.00 hours so we can prepare it for the next patient. You may wait in the day room until you are ready to go home.

We will supply any new medication you will need following your surgery.

We will not provide further supplies of your regular medication. You can get these from your GP in the usual way.

If you are eligible for hospital transport please tell the discharge planning nurse.

## **How will I feel as I recover?**

You may feel tired and anxious when you first go home. This is normal. Resting during the day should help. It is normal to experience headaches. You will be given painkillers to take home.

Increase the amount of physical activity gradually when you feel able to.

Go back to work when you feel ready. You may wish to discuss this with your consultant when you return to outpatient clinic. You will be sent an appointment usually within 6 to 12 weeks.

If you drive you may have to notify the DVLA of your operation. Your surgeon will advise you when you can drive again.

## **What are the risks?**

When you are at home it is important that you contact the ward or your GP if you develop any of the following:

- a fever(which may be a sign of infection)
- increased fits
- severe headaches (a sign of raised pressure in the brain)
- frequent vomiting (a sign of raised pressure in the brain)
- drowsiness
- swelling or oozing from the wound sites

## **If I still have questions?**

You can contact the ward at any time if there is anything you are concerned about.

- Brodie ward: 020 8725 4646/4647
- McKissock ward: 020 8725 4644/4645

Other useful contact numbers:

- Neurosurgical Bed Manager: 020 8672 1255 Bleep 7251.

### **Further Information:**

- Brain Tumour UK: 0845 4500386
- Association for Spina Bifida and Hydrocephalus: 0845 4507755
- National hydrocephalus foundation have a factsheet about shunts  
<http://nhfonline.org/treatment.php>
- Medical Advisory Branch DVLA: 0870 6000301



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