WHAT IS A LUMBO-PERITONEAL SHUNT?

The lining around the bowel in the abdomen is covered with a membrane (peritoneum) that will absorb fluid. In a Lumboperitoneal shunt the tubing runs from the fluid around the brain and spinal cord (cerebrospinal fluid) from the lumbar spine to the peritoneum under the skin. The tubing may be able to be felt under the skin but not usually seen.

WHAT IS A SHUNT?

A LUMBO-PERITONEAL SHUNT is a plastic tube with a valve at the peritoneal end which carries the fluid from where it is building up to another place for it to be absorbed.

WHY DO YOU NEED A SHUNT INSERTED?

The commonest reason that a L.P. shunt is inserted is because you are suffering from a condition called BENIGN INTRACRANIAL HYPERTENSION. It is sometimes used in patients who are suffering from HYDROCEPHALUS. (see leaflets)

WHAT YOU NEED TO TELL THE DOCTOR BEFORE SURGERY?

If you have clotting problems.
Any recent new Health problems.
If you are taking blood thinning 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 and then positioned on your side. The position of the incisions is marked out over the spine and abdomen. You are covered in drapes so that only the incisions and the area between them can be seen. Local anaesthetic is injected and then the skin is cut over the spine. A needle is pushed into the C.S.F. (see below) a fine catheter is inserted down the needle and fed up the inside of the spine. The needle is then withdrawn.

This leaves just the plastic catheter in the C.S.F. with one end free. A metal tunneller is passed under the skin to the other incision on your abdomen. The catheter is passed through the tube in the middle of the tunneller. The tunneller is removed from the abdominal incision. The catheter is left behind and this is then fed down into the abdomen. The catheter is stitched with special connectors to the fascia where it enters the lumbar spine and the abdomen. The skin is then sutured. A dressing is applied over each wound.
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 strength 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. This operation will not hurt much as the incisions are small. Sometimes you will have difficulty passing water and you may require a catheter (this may have been inserted for the operation).

In the next day or so the drip in your arm will be removed. Usually this is the day after surgery. In the next few days 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 will have a X-ray of the catheter to check its position before going home. Commonly you will have a headache for a while after the operation, this resolves after a few days. The sutures are usually removed about 5 - 10 days after the surgery.

HOW LONG WILL YOU BE IN HOSPITAL

Unless you have been admitted as an emergency you may be admitted on the day of surgery or the day before. You will fast from midnight on the day of surgery. You will be discharged about 4-6 days post-operatively. On discharge you will be able to perform most tasks of daily living (e.g. showering/dressing/...). Depending on how quickly you recover from any preoperative disability you may require rehabilitation.

WHAT YOU SHOULD NOTIFY YOUR DOCTOR OF AFTER SURGERY

- Increasing Headache
- Fever
- Fitting
- Swelling or infection in the wound.
- Fluid leaking from the wound.
- Wound breakdown.
- Weakness or numbness
- Drowsiness

WHAT HAPPENS WHEN YOU GO HOME?

You will be tired
- It is common to require a rest in the afternoon
- You may have intermittent headaches.
- Particularly with exercise and this will resolve with time
- Any steroid dose should be reducing slowly

DO NOT DRIVE UNTIL YOU ARE REVIEWED

You will be reviewed at 4 - 6 weeks post-operatively.

WHAT ARE THE RISKS?

Discuss these and others with your surgeon

THE COMMON RISKS ARE

- Wound infection (treated with antibiotics)
- Meningitis (treated with antibiotics)
- Catheter problems:
  - It may come out of the abdomen or spine.
  - It may migrate into spine or abdomen.
  - It may perforate the skin.
  - It may perforate the bowel to produce peritonitis.
  - It may block.
- Post operative blood clot requiring drainage.
- Seizure
- 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 ARE THE SPECIFIC PROBLEMS WITH A L-P SHUNT?

The catheter has a tendency to block. Sometimes this does not matter as the condition for which the shunt has been inserted will have passed and the shunt is no longer needed. If you still need the shunt your symptoms will return.

Because the catheter goes into the spine under the brain and drains fluid from here there is a tendency for the brain to sink through the exit hole in the skull. This may produce a condition called a CHIARI MALFORMATION where the cerebellum blocks this hole and causes pressure on the spinal cord (see anatomy leaflets). If you have this condition already the insertion of a lumbo-peritoneal is contraindicated.

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.

Disclaimer: This brochure is to provide general information and does not replace a consultation with your doctor.

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