

## Neurosurgery

# Hydrocephalus

### What is Hydrocephalus?

Hydrocephalus is a build-up of cerebral spinal fluid (CSF) which surrounds the brain and spinal cord. The excess fluid leads to increased pressure on the brain which can cause damage to the brain tissue.

There are three main types of hydrocephalus:

- Congenital hydrocephalus (present at birth);
- Acquired hydrocephalus;
- Normal pressure hydrocephalus (usually only develops in older people).

This leaflet relates to Acquired hydrocephalus.

### What causes acquired hydrocephalus?

The main causes are as a result of:

- Head Injuries;
- Brain Tumour;
- Cerebrovascular accident (CVA) such as a stroke, blood clot or bleed.

### What symptoms will I have?

- Headaches
- Nausea and Vomiting
- Neck Pain
- Confusion



## Patient Information

- Papilloedema (swelling of the optic nerve)
- Drowsiness
- Poor co-ordination

People would not necessarily experience all of these symptoms, but they would usually experience more than one of them; commonly headaches and nausea.

### What tests will I have?

**Lumbar Puncture:** a lumbar puncture is a procedure that involves using a needle to remove some of the cerebrospinal fluid (CSF) from the bottom of the spine. CSF is the fluid that surrounds the brain and spinal cord. A lumbar puncture is the simplest way to take a sample of CSF and measure pressure for diagnosis of hydrocephalus.

**CT scan:** a CT scan is an X-ray examination that gives much more information than a normal X-ray. It produces detailed cross sectional images of your organs, blood vessels and bones.

**MRI scan:** an MRI scan gives much more information than a CT scan. It uses strong magnetic fields and radio waves to produce very detailed pictures of the brain and other organs.

### What treatments are available?

**External Ventricular Drain (EVD):** an EVD is a device used to reduce intracranial pressure and relieve hydrocephalus when the normal flow of CSF is obstructed. It is a plastic tube inserted into the ventricles (interconnected cavities within the brain) to drain excess CSF and keep them decompressed.

**Shunt:** a shunt is a thin tube implanted in the ventricle within the brain to drain away the excess CSF to another part of the body (often the abdominal cavity, the space around the bowel) where it can be absorbed into the bloodstream.

## Patient Information

**Lumbar Punctures:** a lumbar puncture is a procedure that involves using a needle to remove some of the cerebrospinal fluid (CSF) from the spine. This will lower intracranial pressure and relieve symptoms of hydrocephalus.

### **Common complications associated with Hydrocephalus**

Depending on severity the following are complications of Hydrocephalus, some temporary and some permanent:

- Disability
- Impaired speech
- Memory problems
- Cognition problems
- Vision impairment
- Co-ordination problems
- Epilepsy

### **Further Questions**

This information is an overview of this condition. If you have any further questions, please ask your specialist or GP. Alternatively you may contact:

#### **Neurosciences Unit Ward 43**

Telephone: **024 7696 7802** or **024 7696 5330**

### **Sources of further information**

#### **Brain and Spine Foundation**

LG01 Lincoln House

Kennington Park

1-3 Brixton Road

London. SW9 6DE

[www.brainandspine.org.uk](http://www.brainandspine.org.uk)

Telephone: 0808 808 1000 (Information and support on neurological disorders for Patients, carers and health professionals)

## Patient Information

### Headway

Freephone 0808 800 2244 Monday to Friday 9-5pm

[helpline@headway.org.uk](mailto:helpline@headway.org.uk)

Local support is available.

For further information email: [headwaycw@aol.com](mailto:headwaycw@aol.com)

### NHS Choices

[www.nhs.co.uk](http://www.nhs.co.uk)

The Trust has access to interpreting and translation services. If you need this information in another language or format please contact 024 7696 7036 and we will do our best to meet your needs.

The Trust operates a smoke free policy.

To give feedback on this leaflet please email [feedback@uhcw.nhs.uk](mailto:feedback@uhcw.nhs.uk)

#### Document History

Department:	Neurosurgery
Contact:	27036
Updated:	April 2022
Review:	April 2025
Version:	2.2
Reference:	HIC/LFT/2063/16