

Brain tumours – the basics

Disclaimer: This fact sheet is for education purposes only. Please consult with your doctor or other health professional to make sure this information is right for your child.

This information sheet will tell you in simple terms:

- What is a brain tumour?
- What problems do brain tumours cause?
- How did we find the brain tumour?
- What caused the brain tumour?
- How do we treat brain tumours?

What is a brain tumour?

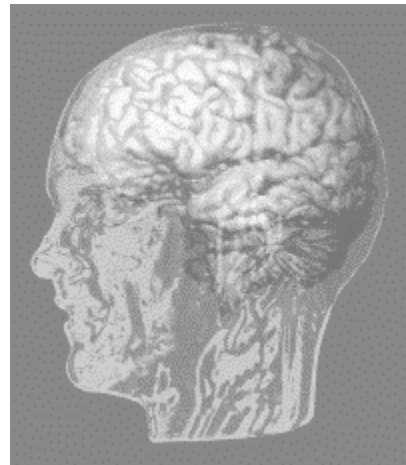
A **brain tumour** is a lump (or mass) inside the brain which should not be there. Many of these lumps are formed of **malignant** (cancer) **cells**. Some brain tumours are made of cells which are less cancerous (**benign**), but these can still cause problems. Brain tumours are the most common type of cancer in children. There are many different types of brain tumours, which are named after the type of cell in them. Similar tumours may occur in the spinal cord.

Your child's brain tumour is called a _____

What problems do brain tumours cause?

The brain has many areas. Each area has a different function.

The tumour that my child has is located →



When a brain tumour grows, it can cause many problems, **depending on where it is**. Some of the problems that you may have noticed could be:

- changes in personality, forgetting things
- loss of strength (weakness) in a part of the body
- double-vision or trouble seeing
- becoming clumsy
- difficulty swallowing or speaking
- seizures (fits or convulsions)
- headaches
- vomiting.

The brain is surrounded on the outside and inside by a clear liquid which is called **cerebrospinal fluid (CSF)**. This CSF constantly flows through natural spaces (**ventricles**) and channels (**aqueduct**) within and

around the brain. If a brain tumour grows so that the flow of CSF is stopped, the CSF liquid builds up, pressing on the brain. This causes a condition called **hydrocephalus**. Children with hydrocephalus often complain of **headaches**. They may also **vomit**, especially in the mornings. Sometimes, they may become **unsteady**, or **sleepy**.

How did we find the brain tumour?

Your doctor will have been worried, and ordered a brain scan (either a MRI scan or a CAT scan), which will show the tumour.

What causes brain tumours?

In most cases we do not know why children develop brain cancers. Some people with rare genetic conditions have a higher risk of getting a brain tumour.

How do we treat brain tumours?

The treatment of each brain tumour is different. In most cases, three specialists will work together to develop the best treatment for your child. These are:

- A **neurosurgeon** (a surgeon who operates on the brain)
- A **paediatric oncologist** (a doctor who treats children with cancer)
- A **radiation oncologist** (a doctor who uses radiation therapy to treat cancer).

My neurosurgeon is: _____

My oncologist is: _____

My radiation oncologist is: _____

What will happen in the first days?

In the first days, many **scans** will be done to find exactly **where** the lump is, usually a CAT scan and an MRI scan. Often, the neurosurgeon will wish to perform an operation (a **biopsy**) to take out a small piece of the tumour so that the exact **type** of tumour is known. This helps in planning the best treatment.

If the tumour is causing hydrocephalus (build up of fluid in the brain), an urgent operation is usually needed to release the fluid. Your neurosurgeon will discuss this with you if it is needed.

There are three main ways to treat brain tumours. These are:

- removal of some or all of the lump with an operation
- use of drugs which kill cancer cells (chemotherapy)
- use of radiation to kill the cancer cells (radiotherapy).

Depending on the type of tumour and where it is, some or all of the ways will be used. Some tumours can not be removed with an operation. Some tumours are not killed with chemotherapy or radiotherapy.

Your specialists will talk to you about the best way to treat your child.

Any questions about this information may be directed to the Oncology Treatment Centre on 9845 2115 (8am-4pm) or Camperdown ward on 9845 1123. Further sheets are available from the Oncology staff or The Children's Hospital at Westmead's website at www.chw.edu.au. Updated April 2003.

the children's hospital at Westmead