

# Secondary brain tumours

---

Information sheet 06

## Introduction

Our information on secondary brain tumours will help you talk with your doctor or medical team about your condition. It should not be used as a substitute for professional care.

---

## What are secondary brain tumours?

Secondary brain tumours are cancers that have spread to the brain from a cancer somewhere else in the body. The place where the cancer first started is called the primary tumour. The most common tumours that can spread to the brain are:

- Lung cancer
- breast cancer
- bowel cancer
- skin (malignant melanoma)
- kidney cancer.

Some of the cells from the primary cancer for example in the lung or breast break away and travel through the bloodstream or lymphatic system (a system of lymph nodes that are found all over the body and are connected by tiny vessels) to lodge in the brain. After some time, they can start to grow into new tumours. These tumours are called secondaries or metastases.

It is important to know if the tumour is a primary or secondary because they are treated differently. There is usually a history of cancer elsewhere in the body with secondary brain tumours and it can even be from a long time ago.

Cancers which start off in the brain usually stay and grow bigger in the same place. So, if there are multiple tumours in the brain, they are often secondary tumours. If it is difficult to tell if a tumour is a primary or secondary, a sample of cells from the tumour (biopsy) will need to be taken to confirm what type of tumour it is.

---

## What are the symptoms?

Your symptoms will depend on where in your brain the secondary tumours are. The tumour can press on the surrounding brain tissue and the symptoms will depend on which function of the body is controlled by this part of the brain.

The most common symptoms are:

- headaches
- weakness in areas of the body

- 
- changes in behaviour
  - seizures (sometimes called fits)
  - symptoms of raised pressure in the brain
  - feeling or being sick
  - confusion and listlessness.

Doctors may sometimes find the secondary tumour before the primary tumour.

---

## How are secondary brain tumours diagnosed?

Once doctors suspect you have a brain tumour, you will have to undergo some or all of the following tests.

- **CT brain scan** (computed tomography) is a specialised X-ray which will build up a three-dimensional picture of the inside of the body. It will take 20-30 minutes. CT scans use a small amount of radiation, unlikely to harm you or anyone you come into contact with.
  - **MRI brain scan** (magnetic resonance imaging) builds a picture of the inside of the brain using magnetism instead of X-rays. It gives very clear pictures of the brain and will show where and how big the tumour is. It usually takes 30-40 minutes. During the scan, you will be asked to lie very still on a couch inside a long tube for about 30 minutes. It is painless but can be quite uncomfortable, and some people may feel claustrophobic during the scan. It is also quite noisy, but you may be given earplugs or headphones.
  - **Biopsy** Sometimes, in order to give an exact diagnosis, a sample of cells from the tumour has to be taken, then looked at under a microscope. The biopsy involves an operation.
- 

## How will my secondary brain tumour be treated?

Steroids are sometimes given to help to control symptoms. They can temporarily improve headaches, weakness of the limbs, and feelings of sickness.

Radiotherapy is the most common treatment for secondary brain tumours but sometimes chemotherapy (cancer drugs) may also be given.

Radiotherapy is the use of high energy X-rays to destroy cancer cells while doing as little harm as possible to surrounding normal cells. The cells that grow and divide quickly (cancer cells) are much more sensitive to radiation than non-dividing, resting (normal) cells. In the brain most normal cells and certainly the important nerve cells (neurons) do not divide. This means that radiotherapy will be much more damaging to the tumour than to the surrounding brain. Nevertheless, the specialists try to make sure as few normal cells as possible are affected by the treatment.

Radiotherapy is effective for many brain tumours. It can stop a tumour growing and may cause it to shrink or in some cases disappear completely. It may be used to reduce cancer symptoms.

It is usually given using beams delivered from outside the body (external radiotherapy).

If chemotherapy is given, it has to be a type that is able to cross the membranes that protect the brain and spinal cord (the blood brain barrier). In certain cancers which have spread to the brain, hormonal therapy (which change the production of particular hormones in the body) may be used. They are most commonly used to treat breast and prostate cancer.

In some cases, especially if the scans show that there is only one secondary tumour in the brain, it may be possible to remove it through surgery.

Following the operation, radiotherapy treatment may be given to reduce the chances of the tumour returning.

Some people with only one secondary tumour may have stereotactic radio surgery. This is a newer technique involving precisely targeted beams of gamma radiotherapy from hundreds of different angles. Only one session of radiotherapy taking is needed.

---

**0845 4500 386**  
**[enquiries@braintumouruk.org.uk](mailto:enquiries@braintumouruk.org.uk)**  
**[braintumouruk.org.uk](http://braintumouruk.org.uk)**  
Tower House, Latimer Park  
Chesham, Bucks, HP5 1TU

Brain Tumour UK is the leading, caring charity committed to fighting brain tumours. Our personalised support is available online, on the phone, by email and through our support groups. Our scientific research improves the quality of life for brain tumour patients and identifies better treatments. We raise awareness to change things for the better, for everyone affected by a brain tumour.

Registered charity 1117538

Company limited by guarantee and registered in England no. 5983336

Registered office: Cawley Priory, South Pallant, Chichester, PO19 1SY

© Brain Tumour UK 2010



**BRAIN  
TUMOUR  
UK**

*Providing support  
Funding research  
Raising awareness*