Symptoms of a brain tumour in adults

A tumour is an abnormal growth caused by cells dividing in an uncontrolled manner.

Almost 11,000 people are diagnosed with a primary brain tumour each year. (Primary means it started in the brain.)

Although this may sound like a lot, brain tumours are rare. So usually your symptoms will NOT be due to a brain tumour.

It’s important to be aware of the symptoms, so you can go to your doctor if you’re concerned.

In this fact sheet:
- What are the symptoms of a brain tumour?
- Symptoms due to raised pressure within the skull
- Symptoms due to location within the brain
- What should I do if I think I might have a brain tumour?
What are the symptoms of a brain tumour?

Our brains are housed inside the rigid, non-expandable protection of our skulls and cushioned by the cerebro-spinal fluid (CSF), with little room to move around. (See diagram below.)

So, when uncontrolled cell division leads to the growth of a tumour, there isn’t much room for this new, abnormal growth.

As a result, as the tumour grows, it can squeeze the normal, healthy brain tissue and/or block the flow of the CSF. This creates pressure on the brain, which causes many of the common symptoms. (See next pages.)

Not every brain tumour will have the same set of symptoms. Different parts of the brain carry out different functions. This means that the specific symptoms of a brain tumour also depend on the location of the tumour within the brain, its size and how quickly it grows.

Having one of these symptoms listed on the next few pages does not necessarily mean that you have a brain tumour. These symptoms can have a variety of other causes, which may or may not be serious.
Symptoms due to raised pressure within the skull

Raised intracranial pressure within the skull can build up fast or slowly. It can lead to the following symptoms:

**Headaches**

These may be:

- worse in the morning (you may wake with one)
- aggravated by straining, coughing or bending over
- not managed by pain killers.

These symptoms can be due to the build-up of pressure overnight or when you cough or bend over, which is then relieved once you stand up and the CSF begins to drain.

Headaches associated with brain tumours:

- can be throbbing or a dull ache
- occur intermittently, starting gradually, but fading over a few hours
- tend to get worse over time
- can resemble common migraine or tension-type headaches.

Other signs, which **may** suggest a brain tumour, include:

- change in previous headache pattern
- headaches associated with one or more of the other symptoms listed in this fact sheet.

Headaches are rarely the **only** symptom of a brain tumour.

For more information on headaches, see our *Headaches* webpage.
Changes in vision

Changes in vision associated with brain tumours can include:

- blurred vision (you may find it difficult to watch TV or read)
- ‘greying out’ (fleeting loss of vision for a few seconds, when you change your posture, such as suddenly standing up)
- difficulty distinguishing different colours in one or both eyes.

Some of these changes are due to the optic disc at the back of the eye becoming swollen due to the increased pressure in the skull. (The point where the optic nerve from the brain enters the eye).

A number of conditions can cause swelling of the optic disc. When it’s due to raised intracranial pressure, this swelling is known as papilloedema.

Papilloedema can be picked up by opticians during a normal eye examination. This is important as people may have papilloedema before they experience any other visual symptoms.

Not all people with raised intracranial pressure (pressure within their skull) will develop papilloedema. This will depend on the location and size of the tumour.

People who have previously had papilloedema may not develop it in the future.

Seizures

Seizures, sometimes called fits, are one of the most common symptoms of brain tumours. They are the symptom that one quarter of people diagnosed with a brain tumour first go to their doctor for.

We may think of a person losing consciousness, lying on the floor and twitching. Whilst this can happen, seizures can be far more subtle.
Symptoms of a seizure can include:

- twitching of a hand, arm or leg
- change in sensation, such as an odd taste or smell
- periods of seeming absent (blank or spaced out)
- adopting an unusual posture.

Often the more subtle seizures will be noticed first by a person’s friends or relatives, as the person having the seizure may be unaware of it or not remember it.

For more information, see our Epilepsy webpage and fact sheet.

**Nausea and vomiting**

As with other brain tumour symptoms, nausea (feeling sick) and vomiting (being sick) may:

- be worse in the morning
- happen if you suddenly change position
e.g. move from sitting or lying to standing.

You may also have hiccups.

These symptoms are caused by changes in the pressure within the brain.

**Drowsiness**

Drowsiness is usually a later symptom of brain tumours. As the tumour grows and the pressure in the skull increases, you may:

- sleep more than normal
- fall asleep during the day

It’s important to treat this, as you may become more difficult to wake and become unconscious.
### Other symptoms
- dizziness
- confusion and irritability
- loss of consciousness (eventually)

Many of the symptoms due to raised intracranial pressure (ICP) can be caused by other medical conditions. So if you are experiencing these symptoms, it does NOT mean you definitely have a brain tumour.

### Symptoms due to location of the tumour within the brain

<table>
<thead>
<tr>
<th><strong>Parietal lobe</strong></th>
<th></th>
<th><strong>Frontal lobe</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Touch/pain</td>
<td>Temperature</td>
<td>Thinking skills</td>
<td>Personality</td>
</tr>
<tr>
<td>Temperature</td>
<td>Hunger</td>
<td>Personality</td>
<td>Mood</td>
</tr>
<tr>
<td>Hunger</td>
<td>Knowing the position of your body</td>
<td>Thinking skills</td>
<td>Mood</td>
</tr>
<tr>
<td>Knowing the position of your body</td>
<td>Hand-eye co-ordination</td>
<td>Thinking skills</td>
<td>Mood</td>
</tr>
<tr>
<td>Hand-eye co-ordination</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Occipital lobe</strong></th>
<th></th>
<th><strong>Temporal lobe</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sight</td>
<td></td>
<td>Hearing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Memory</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Emotion</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Cerebellum</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance and co-ordination</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Brain stem</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Breathing</td>
<td></td>
</tr>
<tr>
<td>Heart rate</td>
<td></td>
</tr>
<tr>
<td>Swallowing</td>
<td></td>
</tr>
</tbody>
</table>

© The Brain Tumour Charity

*The main areas of the brain and their functions*
The brain is divided into four lobes, plus two other important areas called the brain stem and the cerebellum. The presence of a brain tumour can cause damage to healthy brain tissue, disrupting the normal function of that area.

In addition, the brain is divided into two halves, with the right half controlling the left side of the body and the left half controlling the right side.

For more information, see The human brain webpage and fact sheet.

Frontal lobe
The frontal lobe plays a huge role in what we do and who we are. It controls our personality, emotions, memory and behaviour.

If a brain tumour is located in the frontal lobe, symptoms may include difficulty with:

- concentrating
- speaking and communicating
- controlling emotions and behaviour (personality changes)
- learning new information.

A frontal lobe tumour can also cause:

- lack of inhibition
  - e.g. making inappropriate comments during conversation or laughing in inappropriate situations
- weakness in the opposite side of the body from the tumour
- loss of smell.
**Temporal lobe**

Damage to the temporal lobe can cause difficulty with:
- hearing
- speaking
- identifying and categorising objects
- learning new information
- correctly identifying emotions in others.

A temporal lobe tumor can also cause:
- memory loss
- seizures or blackouts
- sensations of strange smells.

**Parietal lobe**

Damage to the parietal lobe can cause difficulty with:
- bringing together information from your different senses (touch, vision, hearing, smell, taste) and making sense of it
  - e.g. you may bump into furniture that you have seen, but have misjudged where it is in relation to yourself
- co-ordinating movements
- spatial awareness
  - e.g. judging distances, hand-eye co-ordination
- speaking, understanding words, writing or reading.

A parietal lobe tumor can also cause:
- numbness on the opposite side of the body from the tumor.
Occipital lobe
Damage to the occipital lobe can cause:
- difficulty with vision e.g. identifying objects or colours
- loss of vision on one side.

Cerebellum
Damage to the cerebellum can cause:
- difficulty with balance
- loss of co-ordination
- difficulty walking and speaking
- flickering of the eyes
- vomiting
- stiff neck
- problems with fine co-ordination of the muscles, leading to problems with dexterity (skill in using your hands).

Brain stem
Damage to the brain stem can cause:
- unsteadiness and difficulty walking
- facial weakness
- double vision
- difficulty speaking and swallowing.
What should I do if I think I have a brain tumour?

Brain tumours are rare, so it’s unlikely you will have a brain tumour. However, if you’re worried, if a symptom persists or if you have more than one of these symptoms, make a note of your symptoms and when you have them, and take this ‘diary’ along with this fact sheet to your doctor - you are not wasting their time.

If your symptoms are limited to changes in vision and/or headaches, get your eyes checked by an optician while you are waiting for your GP appointment.

Evidence shows that when tumours are diagnosed at an early stage, the treatment options and outcomes are greater.

Do you have information about the symptoms of a brain tumour in children and teenagers?

Brain tumours in children and teenagers are relatively rare, just 500 occur per year in the UK. Whilst some symptoms in children and teenagers are similar to those in adults, there are other symptoms.

You will find lots of information on our HeadSmart – be brain tumour aware website: headsmart.org.uk
What if I have further questions or need other support?

You can contact our Information and Support Team in the following ways:

0808 800 0004
(Free from landlines and most mobiles: 3, O2, EE, Virgin and Vodafone)

support@thebraintumourcharity.org

Live Chat
Get in touch with us online via thebraintumourcharity.org/live-chat

Join one (or more) of our closed Facebook groups: bit.ly/FBSupportGroups

thebraintumourcharity.org/getsupport

About this information resource

The Brain Tumour Charity is proud to have been certified as a provider of high quality health and social care information by The Information Standard - an NHS standard that allows the public to identify reliable and trustworthy sources of information.

Written and edited by our Information and Support Team, the accuracy of medical information in this resource has been verified by leading health professionals specialising in neuro-oncology.

Our information resources have been produced with the assistance of patient and carer representatives and up-to-date, reliable sources of evidence.

We hope that this information will complement the medical advice you have already been given. Please do continue to talk to your medical team if you are worried about any medical issues.

If you would like a list of references for any of our information resources, or would like more information about how we produce them, please contact us.

We welcome your comments on this information resource, so we can improve. Please give us your feedback via our Information and Support Team on 0808 800 0004 or support@thebraintumourcharity.org.

Disclaimer: This resource contains information and general advice. It should not be used as a substitute for personalised advice from a qualified specialist professional. We strive to make sure that the content is accurate and up-to-date, but information can change over time. Patients must seek advice from their medical teams before beginning or refraining from taking any medication or treatment. The Brain Tumour Charity does not accept any liability to any person arising from the use of this resource.
Your notes:
About The Brain Tumour Charity

The Brain Tumour Charity is at the forefront of the fight to defeat brain tumours and is the only national charity making a difference every day to the lives of people with a brain tumour and their families. We fund pioneering research worldwide, raise awareness of the symptoms and effects of brain tumours and provide support for everyone affected to improve quality of life.

We wouldn’t be able to make the progress we have without the incredible input we receive from you, our community. Whether it’s reviewing our information resources, campaigning for change, reviewing research proposals or attending cheque presentations, everything you do helps to make a difference.

To find out more about the different ways you can get involved, please visit thebraintumourcharity.org/volunteering

We rely 100% on charitable donations to fund our work.

If you would like to make a donation, or find out more about other ways to support us, including leaving a gift in your Will or fundraising through an event, please get in touch:

Visit thebraintumourcharity.org/get-involved
call us on 01252 749043 or email fundraising@thebraintumourcharity.org

© The Brain Tumour Charity.
Version 2.0 May 2018
Review date: May 2021