

# Memory difficulties and brain tumours

Our brain controls our cognitive functions including reasoning, attention, language and memory. Not everyone with a brain tumour will experience memory difficulties, and for those that do, the symptoms and severity will differ from person to person.

This fact sheet gives information about the memory difficulties associated with brain tumours and provides some practical suggestions for how to cope with them.

### In this fact sheet:

- What is memory?
- How can a brain tumour affect memory?
- Answers to some common questions you may have about memory difficulties

# What is memory?

Memory is one of our cognitive (mental) functions. It is our ability to take in and store information, as well as to recall that information at a later time. There are two types of memory:

#### Short term memory (also known as 'working memory')

This type of memory is used when we remember things from just a few seconds ago, such the name of a person we have just met. Short term memory lasts for approximately 20 seconds. A short term memory can be forgotten after those few seconds or can be converted into long term memory, depending on its importance and the circumstances in which it was stored.

#### Long term memory

Long term memory stores and allows you to recall information from the past, whether this is a minute ago, a year ago or many decades ago. Long term memory can be further divided in to three sub-types:

#### Procedural memory

Procedural memory involves remembering how to carry out processes and activities such as swimming, driving and riding a bike.

#### Semantic memory

Semantic memory is a type of memory that allows us to describe and give meaning to our world. The language we use and all the concepts associated with it, are semantic memories. For example, naming a city, describing what a cat is, or explaining what you were taught at school involves semantic memory.

#### Episodic memory

Episodic memory is the memory of specific events and experiences you have lived through, otherwise known as autobiographical events. For example remembering what happened at a family member's birthday involves episodic memory.

# How can a brain tumour affect memory?

Multiple areas of the brain are involved in storing and recalling different types of memories. For this reason, it is not always possible to accurately predict if and how a person's memory will be affected by a brain tumour.

Memory difficulties can be caused by the tumour itself pushing against parts of the brain, by surgery to remove the tumour or as a side-effect of chemotherapy or radiotherapy. The effects on memory differ in symptoms and severity from person to person and not everyone who has a brain tumour or treatment for a brain tumour, will experience memory problems.

If you display memory problems, you will usually be referred to a neuropsychologist or clinical psychologist who will run various memory tests to help identify which part of your memory functioning has been affected and to provide you ways of coping. The tests can assess your ability to store and recall information and to solve problems. An example of what you may be asked is to recall a list of words that have just been read out to you.

# Types of memory difficulties

Memory difficulties are sometimes referred to as 'amnesia'. The two most common types of amnesia are:

#### • Retrograde amnesia

Retrograde amnesia describes loss of memory of the time leading up to a brain injury. This may include loss of memories from before you had a brain tumour or before you had treatment.

#### • Anterograde amnesia

Anterograde amnesia is when you have difficulties remembering information and events that have happened since you had a brain tumour. This may affect your ability to learn new information or to remember people you have met since having the brain tumour.

# What can I do to help cope with memory difficulties?

Identifying exactly what kind of memory difficulties you are affected by can help you and your health team devise a coping strategy aimed at reducing the impact of these problems on your everyday life. You may find the following suggestions useful:

#### Take care of yourself

Our energy levels affect how well we function mentally. Getting a good amount of sleep (6-8 hours) and eating regular, healthy meals can help improve your capacity to memorise and recall memories.

#### Keeping things relatively simple

Memory difficulties may affect your ability to undertake complex and energy-demanding activities. It is important for you to know your limits and avoid overworking yourself to the point of feeling confused and anxious.

#### Keeping a diary

A diary is a good way to keep track of your appointments and any other arrangements you may have planned. It may be useful to get into the habit of writing everything down and checking your diary regularly. You can also use alarms on watches or mobile phones to remind you of specific tasks or appointments or even just to remind you to check your diary.

#### Medication organisers or pill boxes

If you are taking prescription medication you may wish to buy a medication organiser or pill box. Medication organisers and pill boxes will allow you to track what you have to take and by when. These are available from most pharmacies.

#### • Develop a set routine

Try to develop a set routine and try to leave items in the same places around your home so that you know where to look for them. For example, if you have difficulty finding your house keys, try to always leave them in the same drawer or try leaving a note on the door reminding you to take them.

#### • Leave yourself reminder notes

Reminder notes can help you with things you might otherwise forget, for example, you could leave yourself a note by the front door reminding you to check that windows are closed and that the hob is off before you leave the house or you can leave a note on your bedside table at night reminding you to check you have locked up.

#### Store important telephone numbers

For easy access, you could store useful telephone numbers in your phone or on a single piece of paper. You could list an 'in case of emergency' (ICE) number in your phone so that someone else can find it for you even if you can't.

For more information on how to cope with memory difficulties visit the American Brain Tumour Association website at: abta.org/brain-tumor-information/symptoms/memory-loss.html

# Helpful resources

#### Alzheimer's Society

Being diagnosed with a brain tumour does *not* mean that you will experience dementia. However, you may find some of the resources offered by the Alzheimer's Society helpful. Alzheimer's Society is the leading support and research charity for those affected by dementia. Their website contains information about memory loss. *alzheimers.org.uk* 

#### • Getting your affairs in order

If you are affected by memory problems, you may want to get your affairs in order. You may want to choose who will be your legal carer, or you may want to set aside funds for your children's education. For more information see our getting your affairs in order fact sheets on our website: thebraintumourcharity.org/get-support/getting-your-affairs-order/

# What if I have further questions?

If you require further information, any clarification of information, or wish to discuss any concerns, please contact our Support and Information Team:

Call: 0808 800 0004

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

Email: support@thebraintumourcharity.org

Join our closed Facebook group: bit.ly/facebooksupportgroup bit.ly/carersupportgroup

### About this fact sheet

This fact sheet has been written and edited by The Brain Tumour Charity's Support and Information Team. The accuracy of medical information has been verified by leading health professionals specialising in neuro-oncology. Our fact sheets have been produced with the assistance of patient and carer representatives and up-to-date, reliable sources of evidence. If you would like a list of references for any of the fact sheets, or would like more information about how we produce them, please contact us.



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Your notes

## About us

The Brain Tumour Charity makes every effort to ensure that we provide accurate, up-to-date and unbiased facts about brain tumours. We hope that these will add to the medical advice you have already been given. Please do continue to talk to your health team if you are worried about any medical issues.

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 to increase survival, raise awareness of the symptoms and effects of brain tumours and provide support for everyone affected to improve quality of life.

We rely 100% on charitable donations to fund our vital work. If you would like to make a donation, or want to find out about other ways to support us including fundraising, leaving a gift in your will or giving in memory, please visit us at thebraintumourcharity.org, call us on 01252 749043 or email fundraising@thebraintumourcharity.org

#### Research | Awareness | Support





Registered office: Hartshead House 61-65 Victoria Road Farnborough Hampshire GU14 7PA

GU14 7PA 01252 749990

enquiries@thebraintumourcharity.org thebraintumourcharity.org

Registered Charity 1150054 (England and Wales) SC045081 (Scotland).

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