

## Personality changes and brain tumours

*Our brains control every aspect of who we are, what we think and how we feel. If you have a brain tumour it is possible you could experience some personality changes.*

*This happens most often when the tumour is in the frontal lobe of the brain but can occur with any brain tumour and can also be due to the impact of diagnosis and treatment.*

*This fact sheet aims to outline the possible personality changes associated with brain tumours and to provide practical suggestions for ways of coping with them.*

### In this fact sheet:

- What sort of personality changes might I experience?
- Why can brain tumours cause personality changes?
- How can I cope with personality changes?
- Answers to some common questions you may have about personality changes linked to brain tumours

### What sort of personality changes might I experience?

While a certain amount of personality changes might be experienced due to the natural reaction to diagnosis and treatment, not everyone with a brain tumour will experience personality changes that could be classed as problematic.

If you have or had a brain tumour, you may experience changes to aspects of your personality. Personality changes may include:

- Irritability or aggression
- Disinhibition - loss of inhibitions or restraints and behaving in socially or culturally unacceptable ways
- Confusion and forgetfulness (For more information see our *Memory difficulties and brain tumours* fact sheet)
- Apathy (lack of interest and motivation)
- Depression and blunting/flattening of emotion (For more information see our *Depression & brain tumours* fact sheet)
- Anxiety
- Mood swings (known as 'emotional lability')
- Difficulty planning and organising (For more information see our *Cognition and brain tumours* fact sheet)
- Difficulty identifying emotions in yourself and others

### Why can brain tumours cause personality changes?

There could be several reasons why you or your loved one may experience personality changes, each of which could be interlinked. Knowing that there is a reason for the personality change can feel hugely relieving and can make a big difference in starting to cope emotionally.

#### Location of the tumour

As a brain tumour grows, it puts pressure on surrounding tissue affecting the function, process or part of the body that is controlled by that area of the brain. Personality changes are most common in people when the tumour is located in their frontal lobe. This is because the frontal lobe is responsible for many functions - it controls your personality and emotions and plays a vital role in problem solving and long-term memory.

For more information see our *The human brain* and *Memory difficulties and brain tumours* fact sheets.

Our ability to regulate our behaviour and restrain ourselves is also controlled in the frontal lobe so, if you have a tumour here, you may act in ways that are considered socially inappropriate. This can be very difficult for those around you to understand and can put a strain on personal relationships.

As well as the frontal lobe, personality changes can be caused by a tumour in the pituitary gland. The pituitary gland is not technically part of the brain, but it is located very near to the brainstem.

For more information see our *The human brain* fact sheet.

The pituitary gland secretes hormones, so a tumour here can lead to the over or under production of hormones, affecting some emotions and causing changes in your sex drive. Treatments such as hormone replacement therapy can help to redress this balance, if appropriate.

#### Swelling

Another possible reason for personality change is swelling in the brain (known as 'oedema'). This could result from treatments including surgery, radiotherapy and chemotherapy (for more information see our *Neurosurgery*, *Radiotherapy* and *Chemotherapy* fact sheets). Personality changes that have occurred as a direct or indirect result of these treatments usually pass gradually as you recover from the treatment.

Large tumours can have a greater effect on personality as they affect a greater area. However, even a small tumour in a key structure of the brain can have a significant impact. A lower grade (1 or 2), slow growing tumour often allows the brain more time to adapt around it, causing less swelling and personality change than a higher grade (3 or 4) tumour, which grows more quickly.

Steroids help to reduce swelling and therefore reduces personality effects, although they can also affect your emotions; you may feel anxious, irritable and emotional and experience mood swings. A small number of people may experience what is referred to as 'steroid' induced psychosis

For more information see our *Steroids* fact sheet.

### The impact of the diagnosis and treatment

Personality changes might be experienced as a natural reaction to the diagnosis and treatment. The emotional impact of the diagnosis, undergoing treatment, and the lifestyle changes that are often necessary for a person living with a brain tumour, can affect mood, general persona and can cause a person to become more irritable.

Treatment and frequent journeys to medical appointments, can also dramatically lower energy levels, so someone who was very active before they had a brain tumour may no longer be. Confusion and mood swings can also be the result of medication or combination of medications interacting. It is worth speaking to your doctor if you are experiencing such effects as they may be able to alter your medication.

## How can I cope with personality changes?

### Talking to others

Many people find just talking to others helpful. This can be useful to patients and carers alike. You may wish to share your feelings with close family or friends, or you could seek support from a counsellor. Your GP will be able to refer you to an NHS counsellor or psychologist (if there is one available in your area), or you could find one who practices privately but this may have a cost (see the *resources* section of this fact sheet).

Some people find support through face-to-face groups, telephone support groups and closed Facebook groups. What is important is that you find support in a way that suits you best and which makes you comfortable.

### Monitoring others' reactions

If you are living with a brain tumour and are aware, or are concerned that you may be acting inappropriately, you may find it helpful to pay close attention to others' reactions and responses. This may help to give you an idea of whether the way you are acting is 'normal'. If those around you tell you that you are acting inappropriately, try not to take offence - they are most likely trying to be helpful.

You could ask a close family member or friend to give you guidance on what is appropriate behaviour in situations.

### Medication

To help cope with personality change, it is always a good idea to speak to your doctor. They will be able to talk through options available to you such as medication, and if appropriate, refer you to a psychologist, who can help to provide strategies and ways of coping with the change.

As outlined, a medication that can be prescribed for swelling are steroids. If appropriate, your doctor may prescribe other medications, such as tranquilisers, to help with anxiety or aggression, or anti-depressants if you are experiencing depression.

### Helping a loved one

It can be very upsetting to see personality changes in someone you love. Some people say, for example, that the person they married is not the same person now that they have a brain tumour.

The best way to help will depend on the nature of the personality change and the nature of your relationship, but having patience and understanding can be very supportive. Below are some other strategies that may be helpful:

- To help with planning and organising, break down tasks into small chunks. For example, rather than asking your loved one to clean the kitchen, break this down into tasks such as 'please put dirty dishes in dishwasher, clean the floor' etc.
- To help with confusion, it may be useful to minimise distractions. For example turn off background noise and avoid busy places that could be overwhelming for the person.
- If your loved one is showing signs of aggression, try to create a calm environment or even remove your loved one from stressful situations, try to remain calm and orient the person by identifying yourself and stating your intentions.
- To help with aggression, there may be something particular that is bothering the person, for example the person may be tired or need to use the bathroom. A good strategy is to pay attention to what triggers the person's agitation and try to resolve the problem before it escalates.
- If your loved one is showing inappropriate behaviour, try not to show embarrassment or disgust. Instead, let them know that their behaviour is not appropriate, and give them consistent guidance on how to behave.

- To help your loved one with inappropriate behaviour it may be useful to speak about this with other close friends and family. If they have an understanding of the reasons behind a person's behaviour then they will be able to support the person or ignore some comments.
- Try to avoid comparing the person now to the 'person they were before' too much, which can be upsetting for both of you.
- Try to recognise the change as part of the brain tumour, not the person you love. This can be very difficult, for example, if the person has become irritable and it feels as though they are taking everything out on you.

## Will I be aware of the change to my personality?

This varies. Some people are aware of their personality changes, some people aren't, or they may not have full awareness. For example someone may be aware that they are less patient and have a shorter temper than they did before but not be able to link the cause and the effect. Some people are aware they are behaving in an inappropriate manner but will be unable to stop themselves.

Discovering the source of the problem is the first step and a way to evaluate changes in personality is to consult with a neuropsychologist. Neuropsychologists specialise in physical effects of brain disease or injury on mental abilities.

In a neuropsychological assessment, the neuropsychologist conducts a series of tests examining memory, thinking speed, attention, concentration, language, motor skills and mood. They also assess the executive functions which include planning and organising. Information is often collected from friends and families as you may be unaware of the changes to your personality.

The results of the tests help the neuropsychologist decide if there is any need for therapies, medications or strategies to help make adaptations.

## Will I go back to how I was before?

Some people report that they feel less stressed by things than they did before their diagnosis while some people may feel much less tolerant of others. The extent of personality change will really depend on what is causing it and which area of the brain is affected. Personality changes may be helped by medication or they may fade with time as the effects of treatment have worn off.

If the change is due more to the emotional impact of living with a brain tumour, psychological support can help. If the change is physical in the brain, for example, it is the result of surgery or radiotherapy, the person may not go back to the way they were before. In addition to this, if a person's tumour continues to grow, personality changes may become more pronounced or other changes in the personality may begin to appear.

## Resources

Below is a list of resources that you may find helpful in coping with personality change, for anyone affected by a brain tumour.

- **Connecting through compassion. Guidance for family and friends of a brain cancer patient.**  
Aldrich J. and Peterson N.  
This book is written by people who have cared for a spouse with brain cancer. It aims to help equip readers with coping strategies.
- **Checking out: An in-depth look at losing your mind.**  
Graves C.  
This book is a memoir written by someone whose husband developed personality changes as a result of his brain tumour.
- **Day By Day.**  
Nichols M.  
This book is an inspirational tale of somebody overcoming not only the physical struggles, but also the emotional and social struggles of a brain tumour diagnosis.

These books are available on [amazon.co.uk](https://www.amazon.co.uk)

- **British Association for Counselling and Psychotherapy (BACP)**  
Information about finding a therapist is available on the BACP's website:  
[bacp.co.uk/seeking\\_therapist/right\\_therapist.php](https://www.bacp.co.uk/seeking_therapist/right_therapist.php)
- **British Psychological Society (BPS) Directory of chartered psychologists.**  
Information about finding a chartered psychologist is available on the BPS's website:  
[bps.org.uk/bpslegacy/dcp](https://www.bps.org.uk/bpslegacy/dcp)
- **The Brain Tumour Charity's Facebook Support Groups:**  
Connect with other people to share experiences, find and give support and feel less isolated:  
[bit.ly/facebooksupportgroup](https://bit.ly/facebooksupportgroup)  
[bit.ly/carersupportgroup](https://bit.ly/carersupportgroup)  
[bit.ly/parentsfacebookgroup](https://bit.ly/parentsfacebookgroup)
- **One Plus One:**  
A charity who works to strengthen couple and family relationships.  
[oneplusone.org.uk](https://www.oneplusone.org.uk)
- **Relate**  
Relate are a charity who provide support services to people experiencing relationship problems. Their support services include counselling for individuals, couples and families.  
[relate.org.uk](https://www.relate.org.uk)
- **Child Brain Injury Trust**  
Child Brain Injury Trust have produced a range of fact sheets to help parents understand and manage personality changes in children as a result of brain injury. Topics include *Changes in behaviour* and *Behaviour practical strategies*.  
[childbraininjurytrust.org.uk/how-we-help/parent-and-professionals/factsheets/](https://www.childbraininjurytrust.org.uk/how-we-help/parent-and-professionals/factsheets/)

Disclaimer:

The Brain Tumour Charity provides the details of other organisations for information only. Inclusion in this factsheet does not constitute a recommendation or endorsement.

## 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](mailto:support@thebraintumourcharity.org)

Join our closed Facebook Groups:

[bit.ly/facebooksupportgroup](http://bit.ly/facebooksupportgroup)

[bit.ly/carersupportgroup](http://bit.ly/carersupportgroup)

[bit.ly/parentsfacebookgroup](http://bit.ly/parentsfacebookgroup)

## 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](http://thebraintumourcharity.org) or call us on 01252 749990 or email [fundraising@thetumourcharity.org](mailto:fundraising@thetumourcharity.org)

## About this fact sheet

This fact sheet has been written and edited by The Brain Tumour Charity's Information and Support Team. The accuracy of medical information has been verified by a leading neuro-psychiatrist. 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

## Research | Awareness | Support



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