Headway
the brain injury association

Headaches

after brain injury

This publication describes common types of headaches that can be experienced after brain injury. It describes how to get professional support for headaches, as well as suggesting tips for coping with this issue.

www.headway.org.uk
0808 800 2244

Contents

Introduction 1
Causes of headaches after brain injury 2
Types of headaches after brain injury 2
Treating headaches after brain injury 4
Tips for managing headaches after brain injury 7
Acknowledgements 9
Useful organisations 9

Introduction

Headaches are one of the most common effects of brain injury, especially following traumatic brain injury (TBI). Headaches that develop after sustaining a TBI are referred to as post-traumatic headache.

Headache pain can often occur at the site of impact, but can also occur around the temples, the forehead, the back of the head, around the eyes and the vertex (top of the head). Neck pain is also very common after TBI and can be experienced as a precursor for some types of headaches.

Most headaches settle gradually with the passage of time after the injury, although for some people headaches can continue for years.

This publication describes common types of headaches that can happen after brain injury and directs to sources of support, as well as offering tips on coping with headaches.

The information in this publication does not replace clinical guidance from medical professionals. You should always get advice from your GP or other suitably qualified professional for help with managing the effects of brain injury.

Causes of headaches after brain injury

Headaches are caused by a number of physical changes in the brain following injury. There can be primary (direct) injury or secondary injury to the tissues or nerves following a traumatic incident.

There may also be damage to the parts of the brain that process pain.

Injury along certain pathways and areas of the brain can also cause pain receptors, called nociceptors, to become hypersensitive.

Types of headaches after brain injury

There are different types of headaches that can occur. These have differing features such as the type of pain, the onset and other associated features of the pain. It is possible to have overlapping symptoms of different types of headaches, however many people will experience a single type of headache.

If you experience a sudden, excruciatingly painful headache at the back of the head, worst at the point of onset, with or without a history of brain injury, this is known as a 'thunderclap headache'. This requires urgent medical attention as it could be a sign of something serious. Call 999 or have someone take you to your nearest Accident and Emergency department immediately.

Knowing the type of headache that you experience can help you to learn ways in which to manage the pain most effectively. The most common types of headaches are as follows.

Tension-type headache

These tend to be experienced as a mild to moderate pressing or squeezing sensation and can occur on both sides of the head. Stress or physical activity can trigger these or cause the symptoms to worsen. Tension-type headaches can come and go in episodes or be continuous.

Migraine headache (including vestibular migraine)

These can occur anywhere although they tend to occur on one side of the head and cause moderate to severe pain. The pain is described as pounding or throbbing. Sensitivity to light or noise, vomiting and auras (sensations such as seeing lights just before a migraine is about to start) can occur during a migraine headache.

Vestibular migraine is a type of migraine associated with vertigo. People who have migraine (or a family history) prior to sustaining a TBI are more likely to develop post-traumatic migraine.

Cervicogenic headache

Pain can sometimes start in the neck following injury to the neck or back of the head. These headaches usually occur in the back of the head. Neck movements and pressure/ stress can trigger this type of headache.

Cluster headache

Cluster headaches tend to occur on one side of the head. The pain can be very severe and is described as a boring or drilling feeling. It tends to start around the eyes and spreads. These types of headaches are common in men.

Analgesic overuse headaches

Taking too much pain medication for headaches can, paradoxically, also cause headaches - these are known as analgesic overuse headaches or medication overuse headaches.

When the effects of medication such as paracetamol start to wear off, the pain from an analgesic overuse headache can be even worse than the original headache pain. This is why it is very important to follow the correct dosage of medication for headaches and avoid the long-term use of these medications.

Headaches after mild head injury

Headaches are a common effect of mild head injuries that should resolve themselves over the next few days and weeks. However, if the headache is severe or accompanied by any of the emergency symptoms listed in our *Mild head injury and concussion* publication, you should visit Accident and Emergency (A&E) immediately as it could be a sign of something more serious.

Treating headaches after brain injury

Medication

You should seek advice from your GP, pharmacist, or neurologist before taking any medication for your headache, as some may be more suitable than others depending on the type of brain injury you have had and other medications that you may be taking.

Many people begin by trying to manage headaches with over-the-counter medication such as paracetamol or ibuprofen. These should not be taken on a regular basis. If you are

starting to need these on a regular basis, it may be necessary to speak to your GP.

It is very important to always adhere to medication dosage instructions, as taking too much can cause analgesic overuse headaches (see section *Types of headaches after brain injury*).

Lifestyle modification

Headaches may be triggered by things that you have some degree of control over, such as noise, caffeine, stress or tiredness. If you can identify certain triggers to your headaches, this might help you to manage them.

As a general rule, make sure your diet is healthy and you eat meals at regular times, get enough good quality sleep, regularly exercise, drink plenty of water, and try to avoid caffeine and alcohol.

Further tips for changing your lifestyle to help with headaches are available in the section *Tips for managing headaches after brain injury.*

Complementary therapies

A complementary therapy is something that you can use alongside medication or other professional forms of treatment.

Some examples include mindfulness, aromatherapy, massage, meditation and acupuncture. These therapies can help to relax you, which can help with alleviating some forms of headache.

You can try things like meditation and mindfulness yourself at home. There are plenty of guides online and books to help you learn how to practice these techniques, such as on the NHS website at www.nhs.uk/mental-health/self-help/tips-and-support/mindfulness. You can also watch Headway's video on

mindfulness training by visiting our YouTube channel at www.youtube.com/user/headwayuk. There are also very helpful apps for your phone.

Complementary therapies are not typically offered through the NHS, so may be costly to access. Consider discussing complementary therapies with your GP or researching a therapy type before booking a session.

Getting specialised support

If your headaches do not improve over time or with the methods already described, it may be necessary to seek specialised support. You should start by discussing your headaches with your GP or neurologist, showing them your headache diary (see tips in the following section) if you have kept one.

You may be prescribed stronger medication; remember to follow the dosage instructions carefully.

If your headaches do not settle, you may then require a referral to a specialist headache clinic. These clinics offer a range of therapies to help with managing pain. The therapies can either directly target the pain, for instance through medication or interventions, or can help you with improving your quality of life through exercise, talking therapy or through a pain management programme.

Botulinum toxin (Botox) is commonly associated with cosmetic surgery, but it can also be used to alleviate some types of pain. In some instances, Botox injections can help with improving headaches. This is only licensed when multiple conventional medications have been tried and unsuccessful. **Please remember that Botox must be administered by a headache clinic specialist.**

If stress is causing you to experience headaches, consider seeking a referral for talking therapy through your GP, for instance with a counsellor or psychotherapist. You may also wish to consider talking therapy services if your headaches are causing you to feel anxious or depressed.

Tips for managing headaches after brain injury

The following tips are things that you can try at home to help with managing headaches after brain injury.

Lifestyle changes

- Try to get enough sleep. If you struggle with sleeping at night, try to take naps during the day, although avoid doing this later in the afternoon as it may disrupt your natural night-time sleeping cycle.

- Try to stick to a regular sleep routine, where you go to bed at the same time every night and try to wake up at the same time every morning.

- Try to do some gentle exercise every day as part of a healthy lifestyle.

- Introduce relaxation techniques to your routine such as mindfulness.

- Avoid overstraining your eyes, for instance spending long periods of time at a computer/ mobile phone screen or reading. Remember to get your eyes tested by an optician annually.

Identify triggers

- Common triggers include stress, lights, noise, smells, alcohol, weather changes, and fatigue. Where possible, try to minimise or avoid your triggers, although try not to be too anxious about completely avoiding things either if something is out of your control.

- Avoid caffeine, over-the-counter stimulants, other illegal substances (such as marijuana) and alcohol as these can interfere with the recovery process after brain injury and worsen headaches. If you want to drink coffee or tea, do this in moderation and monitor how you feel afterwards in case they trigger headaches.

- In some instances, hormones may be responsible for triggering headaches. Speak to your GP if you are concerned about your hormones. Bear in mind that a brain injury can affect hormones; more information on this is available in our publication *Hormonal imbalances after brain injury*.

Consider your diet

- Be aware that some types of food may trigger migraine headaches (the research is mixed), such as chocolate, cheese, citrus fruits and tomatoes. There is no need to completely avoid these foods, but try monitoring how you feel after eating them, or avoid them for a short while to see if it makes any difference.

- Some research suggests that high blood pressure can be related to headaches. A low sodium diet may therefore also be helpful with managing headaches.

Keep a headache diary

- It can be useful to keep a record of your headaches when you experience them as this might help with identifying triggers, learning to manage them, and diagnosing them. You can include details such as how painful the headache is, how long the headache lasts, medication used and any symptoms you experienced at the same time.

- Make a note of the time when you experience the headache; gradually you may notice if there are certain times of the day when your headaches are at their worst, which may help with planning your days. For instance, if you become aware that you experience headaches in the afternoons, you can try to keep these free as much as possible.

- Keep a record of pain intensity of each headache, using a rating system where 0 is no pain and 10 is excruciating pain. Make some notes each time you log a headache describing how the pain feels, as this may help with identifying what type of headache it is.

Acknowledgements

Many thanks to Dr Colette Griffin MBBS MD FRCP, Consultant Neurologist, and Dr Bee Eng Ong MBBS, MRes (distinction), MRCP (Neurology), Consultant Neurologist, for their contribution to producing this publication.

Useful organisations

The organisations listed in this section are provided for information purposes only. Their inclusion does not imply endorsement, recommendation, or approval by Headway.

Users should make their own assessment of any organisation or service before engaging with them.

Action on Pain! - for information and support for people affected by chronic pain
Web: www.action-on-pain.co.uk
Tel: 0345 603 1593
Email: painline@action-on-pain.co.uk

Ouch (UK) - for information and support for people affected by cluster headaches
Web: https://ouchuk.org/
Tel: 0800 669 6824

Pain Concern - for information and support on managing pain
Web: www.painconcern.org.uk
Tel: 0300 123 0789
Email: help@painconcern.org.uk

The Migraine Trust - for information and support on migraines
Web: www.migrainetrust.org
Tel: 0808 802 0066

We hope that this has been a helpful resource. Please consider sharing your feedback with us by scanning the QR code or by visiting our publication feedback survey https://uk.surveymonkey.com/r/hwpublications.

Learn more and support our work at www.headway.org.uk/get-involved.

This information was last reviewed in 2021.

We're here to listen.

If you need support, or have a question about brain injury, contact our free nurse-led helpline:

0808 800 2244
helpline@headway.org.uk

0115 924 0800 | enquiries@headway.org.uk
www.headway.org.uk

Head office: Bradbury House, 190 Bagnall Road,
Old Basford, Nottingham, NG6 8SF

Headway – the brain injury association is registered with the Charity Commission for England and Wales [Charity No. 1025852] and the Office of the Scottish Charity Regulator (Charity No. SC 039992]. Headway – the brain injury association is a company limited by guarantee registered in England [No. 2346893].