Headway
the brain injury association

GP's guide

to mild brain injury

This publication is written to assist GPs in providing the best possible support to patients with suspected or confirmed mild brain injury, often also referred to as concussion.

This publication has previously been endorsed by the Royal College of General Practitioners.

www.headway.org.uk
0808 800 2244

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Introduction

Each year, over 1 million people attend emergency departments in England and Wales with a recent head injury. Of people who have sustained a head injury, 95% present with a normal or minimally impaired conscious level, that is, a Glasgow Coma Scale (GCS) score of 13 or more. They may have had no life threatening complications and been discharged home without admission to hospital. In many cases, they may not have received a CT scan. Many more people will not even attend an ED after such an injury.

While most such patients will be fine eventually, many will have sustained a mild brain injury. They may experience post-concussion symptoms for a number of days or weeks and a significant number will have persistent, long-term difficulties. Services to help these people are limited in most areas of the

UK and it is very important that GPs know how to access any support that is available.

Anyone can sustain a mild brain injury and even seemingly trivial knocks can have lasting effects. Those most at risk are very young children, young adult males and the elderly. Common causes include road traffic collisions, falls, assaults, accidents in the home or workplace and sports injuries.

The 'hidden disability': undiagnosed brain injury

It can be all too easy to miss a mild brain injury as the cause of a patient's problems. This may be because:

- There is usually no external sign of injury.
- There was no loss of consciousness and the person may not have even attended the Emergency Department.
- The symptoms can overlap with other conditions, such as depression or other pre-existing mental health issues.
- Other, more immediately serious, injuries have occurred. The effects of the mild brain injury may only become apparent when the other injuries have been treated and the patient has resumed regular life.
- The person may have been under the influence of alcohol at the time of the injury which can mask the cognitive and behavioural symptoms.
- If the injury was caused by a traumatic event, such as an assault, the symptoms may be attributed to a stress reaction or even post-traumatic stress disorder

There may also be no sign of physical damage to the brain. Even if a CT scan has been performed and shown no injury, there may still be effects. CT and MRI scans do not show damage at a microscopic, cellular level, and widespread disturbance of neurons can occur without being visible.

Many recent studies have shown that white matter abnormalities are associated with post-concussion symptoms after mild brain injuries. These subtle deficits are only apparent on diffusion tensor MRI scans and these are not commonly performed.

Effects of mild brain injury

The effects of mild brain injury can be very subtle and are often not obvious to others. However, even seemingly minor problems can significantly affect people's lives and, importantly, those of their loved ones.

Effects include:

Physical problems

- Dizziness and balance problems
- Epileptic seizures or absences
- Fatigue, often severe
- Headaches, often severe and persistent
- Nausea/vomiting
- Sleep disturbance
- Sensitivity to light and noise
- Sexual difficulties
- Visual disturbances (blurred vision, double vision)

Cognitive problems

- Attention and concentration problems

- Decision-making problems
- Language and communication problems
- Object recognition problems (agnosia)
- Face recognition problems, even family and friends (prosopagnosia)
- Perception problems (e.g. inability to perceive particular colours, sounds, shapes, movement, etc)
- Acquired dyslexia
- Information processing difficulties
- Memory problems
- Problem-solving difficulties
- Planning and organisation difficulties

Emotional and behavioural problems

- Anger
- Apathy and loss of motivation
- Impaired insight and empathy
- Irritability
- Personality changes
- Anxiety
- Depression
- Impulsivity and self-control problems
- Mood swings
- Restlessness

Social, personal and practical problems

- Difficulties performing routine domestic activities
- Employment problems, e.g. inability to carry out previous duties effectively, slowness in carrying out tasks, finding work more tiring
- Inability to cope with family demands
- Loss of driving license

- Personal and sexual relationship problems
- Reduced independence
- Self-esteem problems
- Social interaction problems

How long do problems last?

Many studies have looked at the prevalence of post-concussion symptoms after mild brain injuries, with varying results. There is basically no definitive answer to this question and it depends on the outcomes assessed and the measures used.

Many people are symptom free after a few days or weeks. However, when symptoms persist longer than that there is no way of knowing when they will pass.

If a patient has had a head injury at any time and presents with any of the symptoms described below, it is important to refer to relevant specialists. People with persistent post-concussion syndrome (PCS) have great difficulty explaining this to employers, family and friends, who often think that they should have recovered by now, that they are exaggerating the symptoms, or that the problems are caused by other factors. It is vitally important that GPs understand, support and empathise with people in this situation.

High risk groups

It is important to be aware of demographic groups at particular risk of head injuries and to consider whether symptoms are related to an undiagnosed, previously unreported injury.

Examples include:

- Young men
- The elderly

- Homeless people
- Those with a history of offending, particularly violent offending
- Sportspeople
- Those with a history of mental health problems

Referral guide

If you suspect a patient has a brain injury, a referral should be made to a specialist. This could be any of the following, depending on the nature of the symptoms and service provision in your area:

Neurologists and neurosurgeons: For any neurological deficits, whether physical, cognitive, emotional or behavioural. Often the best first option for assessment and further referral to other professionals or for brain scans

Neurophysiologists: For assessment and diagnosis of epilepsy and other disorders of nerve function

Neuropsychologists and neuropsychiatrists: For cognitive, emotional and behavioural problems and their impact on the patient and their family

Rehabilitation medicine consultants: For any rehabilitation input and advice

Provision of neuropsychology and neuropsychiatry is limited in many regions so you will need to investigate referral options. Such services may only be available on the NHS if the patient is first referred to a neurologist. If no NHS referrals are available then it may be necessary to look into a private appointment. A directory of chartered psychologists in private practice is available on the British Psychological Society website, www.bps.org.uk.

Other rehabilitation professionals can help people to overcome their everyday problems. Services you should consider referring to include:

- Cognitive behavioural therapists
- Community brain injury services
- Counsellors and therapists
- Neurophysiotherapists
- Occupational therapists
- Physiotherapists
- Social workers
- Speech and language therapists

Rehabilitation may involve developing strategies to help compensate for memory, attention, fatigue and concentration problems, advice about adapting a person's employment situation so that they can continue to work, or help in boosting confidence and regaining self-esteem. If the above services are not available on the NHS then chartered professionals in private practice may be available.

It is important, where possible, to access professionals with specialist expertise in acquired brain injury. However, if such specialist services are unavailable then any support is better than nothing. For example, counselling and psychological therapy through Improved Access to Psychological Therapy (IAPT) services could be extremely beneficial. Cognitive behavioural therapy is widely available through IAPT services and this approach is highly favoured for the treatment of behavioural problems after brain injury. Additionally, some local memory clinics may have brain injury specialists who can assess memory problems and provide memory aids and strategies.

Dizziness and balance problems are often related to the vestibular system. If you suspect this is the case then you could

consider referral to a local balance clinic if available. Other referral options include:

- Audiologists
- Audiovestibular specialists
- Ear, nose and throat surgeons
- Neurophysiotherapists
- Otologists and neuro-otologists
- Physiotherapists

Family support

Families of people with a brain injury may also need advice and support. The brain injury impacts greatly upon the lives of family members, and it is easy for their own needs and difficulties to be overlooked. Rehabilitation professionals will often work with family members as well in order to help them to cope with the situation.

Driving after brain injury

All drivers are required by law to report any condition that may affect their ability to drive to the DVLA. Failure to do so can result in a £1,000 fine, invalidate their insurance and lead to possible prosecution if the person is involved in an accident. GPs have a vital role to play in ensuring that patients adhere to these rules. If you have any reason at all to suspect that the injury will affect a patient's ability to drive you should tell them this and provide the number for the DVLA . Our publication *Driving after brain injury* may be helpful to yourself and the patient.

Ongoing support

The effects of brain injury impact on social, work and family life and problems are likely to manifest themselves in different ways as a patient's life progresses. It is important for the GP to provide ongoing support and referrals. Even just providing information and a listening ear can have a significant effect on a patient's wellbeing after brain injury.

It is also important to be aware that patients may not always find the problems easy to talk about, especially if there are sexual and relationship difficulties. It may be appropriate to ask if there are any general issues in this area, even if the patient hasn't mentioned them.

Headway services

Headway has a network of over 120 groups and branches throughout the UK. A wide range of services are available including rehabilitation programmes, family support, social re-integration, community outreach and respite care. Many groups and branches provide services for people with minor injuries and often have connections with rehabilitation professionals and counsellors who provide in-house therapy. Services vary depending on the region and you can find contact details of your local group or branch at www.headway.org.uk/supporting-you.

The Headway nurse-led helpline provides information, advises on sources of support and offers a listening ear to anyone affected by brain injury. You can contact the helpline yourself or refer patients to the service. Contact us on 0808 800 2244 or helpline@headway.org.uk.

Final word – other things you can do

We hope that the information in this publication can help you to identify and refer patients with greater efficiency and that you can use the available resources to provide the best care available for patients.

Further information and guidance for GPs and patients is available on our website.

Clinical guidelines

Several UK clinical guidelines have been produced to outline the ideal standards required for the assessment, treatment and rehabilitation of people after brain injury.

These emphasise the need for timely, specialist rehabilitation and support and the role of GPs in facilitating this.

The following are freely available online:

- British Society of Rehabilitation Medicine guidelines from www.bsprm.org.uk/resources/guidelines.
- National Institute for Health and Care Excellence (NICE) guidelines from www.nice.org.uk/guidance.
- Scottish Intercollegiate Guidelines Network (SIGN) guidelines: www.sign.ac.uk.

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 2023.

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

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