the brain injury association

factsheet

Minor brain injury: a guide for GPs

Headway's publications are all available to freely download from the information library on the charity's website, while individuals and families can request hard copies of the booklets via the helpline.

Please help us to continue to provide free information to people affected by brain injury by making a donation at www.headway.org.uk/donate. Thank you.

Introduction

Approximately 1 million people per year attend UK Emergency Departments (EDs) with a head injury. Roughly 900,000 of these people will only have sustained a brief period of unconsciousness or no unconsciousness at all[1]. 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 minor 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 minor 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 minor 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 minor 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[2]. CT and MRI scans do not show damage at a microscopic, cellular level, and widespread disturbance of neurons can occur without being visible [3 4].

Many recent studies have shown that white matter abnormalities are associated with post-concussion symptoms after minor brain injuries. These subtle deficits are only apparent on diffusion tensor MRI scans and these are not commonly performed[5].

Effects of minor brain injury

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

Cognitive problems

- Attention and concentration problems
- Decision-making problems
- Memory problems
- Problem-solving difficulties
- Communication difficulties
- Information processing difficulties
- Planning and organisation difficulties

Emotional and behavioural problems

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

Social and personal problems

- Domestic activities and everyday life problems
- Driving difficulties, which may lead to loss of licence and reduced independence
- Employment problems, e.g. inability to carry out previous duties effectively, slowness in carrying out tasks, finding work more tiring
- Family demands problems
- Independence loss
- Personal and sexual relationship problems
- Self-esteem problems
- Social interaction problems

How long do problems last?

Many studies have looked at the prevalence of post-concussion symptoms after minor brain injuries, with varying results. 20 – 50% of people have been shown to have symptoms persisting beyond three months[6 7]. A recent study found up to 40% of participants met diagnostic criteria for post-concussion syndrome (according to DSM-IV) 12 months after injury[8]. Other research has observed persistent symptoms after one year in 84%[9].

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[10]
- 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 at 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. Addresses of online directories are provided at the end of this factsheet.

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 (CBT) 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 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[11]. 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 Drivers Medical Group. Headway published a booklet called *Driving after brain injury* which you and the patient should find helpful.

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. If the problems persist after minor brain injury then it is important to provide ongoing support and referrals[11]. 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 100 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/in-your-area.aspx**.

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

2013 was a time of enormous changes in the health and social care system. The advent of clinical commissioning groups in England has placed greater pressures and responsibilities on GPs, while changes to the GP contracts in England sees general practice facing new targets and additional workloads. Headway is greatly aware that GPs have to consider every injury, disease and health condition and have limited resources to focus on brain injuries.

We hope that the information in this factsheet 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. We also hope that GPs with commissioning powers can start to make these resources more readily available as widely as possible. There are steps that you can take to improve the situation. The United Kingdom Acquired Brain Injury Forum (UKABIF) makes the following suggestions for healthcare professionals in their 2012 acquired brain injury manifesto[12]:

- Ensure that your clinical commissioning group has a named neurological lead; if not request one
- Review the information and support available for people with an ABI in your area

The national Headway organisation and our local Groups and Branches are here to help. Please visit the GP information section of the Headway website for a range of resources, including Headway publications, academic references, assessment tools, clinical guidelines and useful links. These include the Rivermead Post-Concussion Symptoms Questionnaire, a valid and reliable measure of post-concussion symptoms and the Sport Concussion Assessment Tool (SCAT2). The measures can be administered by GPs in order to give you a firm idea of a patient's problems.

Go to www.headway.org.uk/gp.aspx.

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. *BSRM Standards for Rehabilitation Services, Mapped on to the National Service Framework for Long-Term Conditions*. BSRM, London 2009. Available from www.bsrm.co.uk/ClinicalGuidance/ClinicalGuidance.htm.

National Institute for Health and Care Excellence (NICE). *Head Injury: Triage, assessment, investigation and early management of head injury in infants, children and adults*. National Collaborating Centre for Acute Care: 2007. Available from http://guidance.nice.org.uk/CG56.

Royal College of Physicians and British Society of Rehabilitation Medicine. *Rehabilitation following acquired brain injury: national clinical guidelines* (Turner-Stokes, L, ed). London: RCP, BSRM, 2003. Available from http://bookshop.rcplondon.ac.uk/details.aspx?e=14.

Scottish Intercollegiate Guidelines Network (SIGN). Brain *injury rehabilitation in adults*. Edinburgh: SIGN; 2013. (SIGN publication no. 130). [March 2013]. Available from: http://www.sign.ac.uk.

Online directories

Association of Speech and Language Therapists in Independent Practice
www.helpwithtalking.com

Brain Nav – The National Brain Injury Service Directory
www.brainnav.info

British Association of Behavioural and Cognitive Psychotherapies (BABCP)
www.babcp.com

British Association for Counselling and Psychotherapy (BACP)
www.bacp.co.uk

British Psychological Society (BPS)
www.bps.org.uk

College of Occupational Therapists Specialist Section – Independent Practice
www.cotss-ip.org.uk

College of Sexual and Relationship Therapy (COSRT)
www.cosrt.org.uk

Relate – the relationship people
www.relate.org.uk

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11. Gibson, J. (2008) General practioners and long-term neurological conditions. *Disability and Rehabilitation*; 30 (25): 1956 – 1958.
12. United Kingdom Acquired Brain Injury Forum (2012) *Life after Brain Injury: A Way Forward*. Available at www.ukabif.org.uk/component/chronocontact/?chronoformname=support.

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