

Managing Pain Following Traumatic Brain Injury

Patient Information Booklet



Talis Consulting Limited

What is Pain?



It may sound like a simple question, but pain is a very complex phenomenon. It is an entirely subjective experience, meaning that the only way someone can know you are in pain is if you tell them; there are no outward, objective signs of pain. Therefore pain is a private, personal sensation, and people differ markedly on how much pain they can tolerate, and how they deal with pain when it arises.

Pain is a common consequence of a head injury, with over half of those who suffer a head injury reporting problems with pain. However there is no clear-cut relationship between the severity of your head injury and whether problems with pain occur. Some researchers have even suggested that pain is most commonly a problem following 'milder' head injuries.

What do “acute” and “chronic” pain refer to?

Clinicians and researchers often divide pain sensations into acute and chronic pain. Acute pain is short-term, flare-up pain. It is usually associated with actual physical damage to an area of the body. If pain is acute then it is assumed that given time the body will be able to adequately heal from the damage and the pain will stop.



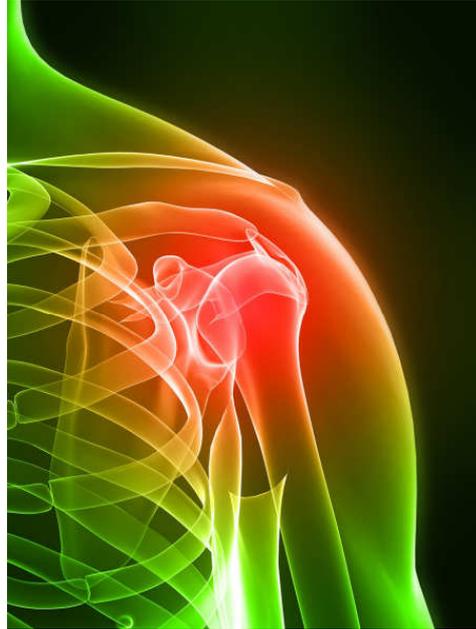
Chronic pain, on the other hand, describes long-term feelings of pain. Unlike acute pain, chronic pain does not necessarily have to be associated with damage to an area of the body; whilst chronic pain often arises after some form initial trauma, its prolonged nature reflects the involvement of disrupted processes in the nervous system itself. Chronic pain is different from acute pain in that it is not necessarily assumed that the body has the capability to heal and that the chronic pain will stop.

The dichotomy between acute and chronic pain is useful because coping strategies tend to be different depending on whether we are dealing with acute or chronic pain. For example because chronic pain is unrelenting, it is more likely that it will be mediated by external factors such as stress and emotions. Also therapies which provide pain relief for acute pain (such as painkillers) will not help chronic pain as the benefits are only temporary and the underlying cause of the chronic pain is not addressed. Psychological interventions such as cognitive behavioural therapy tend to have more success in treating chronic pain symptoms.

What is Pain? (Continued)

Why can a head injury cause problems with pain?

Pain can arise as a direct result of an injury and have nothing to do with your head injury per se (for example broken bones, cuts and bruises), this is acute pain. There may also be pain from secondary consequences of the physical injury: for example healing bones may cause aching sensations. However there may be pain which is derived from damage to the central nervous system, this is often referred to as central pain, and is an example of chronic pain.



Central pain is different from pain due to the initial injury as it can affect areas of the body which were not damaged during your injury. Central pain can affect any area of the body, and the most common area to report pain is in the head.

Central pain can take many forms, with the most common complaint as being prickly or throbbing pain. However burning pain sensations are also reported. The different types of central pain highlight the complex and individual nature of pain.



The cause of central pain is not well understood, however it may be due to damage to areas of the brain with deal with perceptions of pain. However it might also occur due to damage to fibres which send pain signals to the brain. Indeed central pain is often associated with damage to the spinal cord as well as the brain. Finally, some have suggested that central pain is the result of widespread changes to the

excitability of neurones due to the brain injury. This means that neurones (that is nerve cells) signalling pain may fire spontaneously, causing the feelings of central pain.

What is Pain? (continued)

When do problems with central pain occur?

Problems with central pain can occur at any stage, however they most commonly occur weeks or even months following the injury, and are prolonged, chronic pain sensations. Why this is the case is not clear. Some have suggested that the pain occurs during healing processes, or that there are neural changes which continue for some time following a head injury, and these cause the sensations of pain.



What other factors are there in causing pain following a head injury?

The complex nature of pain should not be overlooked, and there are many contributing factors to problems with pain following a head injury. For example some have suggested that personality can have a moderating influence; certain individuals tend to cope better with pain. It has been suggested that variables such as uncertainty⁴, anxiety or depression can moderate perceptions of pain.



Furthermore it is important to remember that you do not live in a bubble, there can be influences from the environment which affect perceptions of pain; for example stress from overcoming a head injury, or from work or family problems can cause greater difficulty in dealing with pain. Even things as simple as the room temperature can influence the perceptions of pain, a room which is too hot or cold can exacerbate problems.

Therefore there are multiple contributing factors to pain, from the biological, psychological and social level. This often means that treatment of pain requires an organized, well-planned intervention tailored to the specific individual.

What Can be Done to Help?

Usually the first step to try to relieve pain is pharmacological intervention. There are a number of medications which can be used to treat central pain. There has been some success with antidepressants, anticonvulsants (anti-epileptic medication) and analgesic (painkiller) medications. However whilst painkillers can be very effective at managing pain, it is important not to come to rely on them. Also further complications can arise, for example some people report that taking painkillers actually begins to increase their pain; so-called 'analgesic rebound pain'.



What happens if the medications do not work?

If medication does not suitably manage problems with pain, then there are other invasive medical procedures which may be recommended. For example some patients are given implantable devices which electrically stimulate the brain and help to relieve central pain, or treatments which kill certain nerves which pass pain messages to the brain.

What other options are available to me?



Cognitive behavioural therapy (or CBT) has been shown to be very effective at helping to relieve problems with chronic pain, it works because pain is a subjective experience, it can be enhanced or reduced by thoughts and feelings. Therefore by changing the way you feel or think about your pain the severity of its sensations can be reduced. It is important to become aware that how you think affects how you feel.

Common ways in which CBT can help you is to allow you to reappraise how you feel about your pain, or how you feel about your ability to cope. If you can accept that your pain is a normal part of your recovery and that you have the abilities to manage and overcome your pain, you may find that you can better control the sensations of pain. A clinical psychologist who is specially trained in CBT will be able to help you achieve these reappraisals and guide you through a course of therapy.

What Can be Done to Help? (Continued)

Which option is the best one for me?



Despite having a wide range of interventions to help deal with central pain, it remains a difficult condition to treat. This may be partly due to the complex nature of central pain, and the myriad of contributing factors. For this reason many have suggested that interventions must be well organized and planned to suit the individual's own need. Often the best results are found with combinations of interventions, such as CBT alongside medication.

This means that your best course of action is to talk to your GP and other health professionals who can refer you to the correct people to help you overcome your pain, for example they might refer you to your local pain clinic.

What is a Pain Clinic?

Pain clinics, which are usually within the NHS, offer help and advice for pain sufferers and their carers on the diagnosis and treatment of common pain complaints. They offer information about investigations and pain treatment options (such as self help strategies and medication choices).



How Can I Help Myself?

Dealing with pain is a particularly personal affair, and there are a number of simple changes you can make to your lifestyle which can help to reduce feelings of pain. As everyone's experience of pain is different, not all of these techniques will be of use to you, therefore take on board the advice which does work for you and tailor it to suit your individual needs.

Reduce stress in your life

Stress can greatly worsen feelings of pain, therefore it is important to try to reduce stress as much as possible. For example don't take on too much work too soon after your injury, and manage any activities which you know are likely to increase your stress. Also, if you feel that you are becoming stressed, make sure you take a break to relax, rather than pushing on through the problem. Sometimes a ten minute break can make a significant difference

Pain and stress often have an unfortunate cyclical relationship, with pain causing stress causing more pain, which in turn causes more stress. It is important that you try and break this cycle of pain and stress.



Recognise that pain and mood are related



It is entirely understandable that being in pain can create a low mood, however it is also the case that mood can worsen feelings of pain. This means that there is a cyclical relationship between mood and pain in much the same way as there is between stress and pain. Therefore in order to break this cycle of mood and pain it may be necessary to look at your pain differently, recognise that it is part of the recovery process from a head injury and remember that it is a very common problem and you are not alone in suffering from it. This is where cognitive behavioural therapy can help you.

It can be hard to overcome a low mood, but there are simple things which can help, such as engaging in activities you enjoy (like tending to the garden or reading a good book) or spending time with people whose company you enjoy.

How Can I Help Myself (continued)

Get enough sleep



A lack of sleep can cause greater problems with pain. This may be a direct result of fatigue, or may be due to indirect processes of lack of sleep causing stress and discomfort. In either case, you should recognise that sleep is important in helping to deal with your pain. However this can be difficult as some individuals have difficulty sleeping following a head injury.

If you are having problems sleeping then there are a few simple techniques to help. Make sure you take some time to relax and unwind before you go to bed, and make sure that your bedroom is quiet and dark and a comfortable place to sleep in.

If your problems sleeping are severe you may wish to discuss them with a GP or clinical psychologist and seek advice from them.

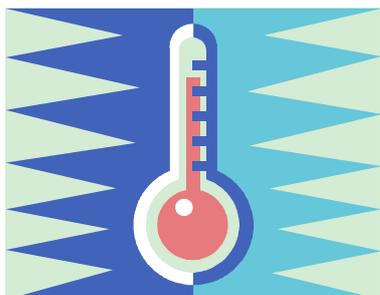
Keep a 'Pain Journal'

Some people find that their pain is triggered or made worse by things which happen in the environment (for example noise, or engaging in a certain activity). However it can be very difficult to work out exactly what these environmental triggers are. One way to help is to keep a 'pain journal' where you note down the situations you are in whenever you feel in pain. This may help to clarify those situations which cause you to feel pain.



Once you have a better understanding of the situations which cause you pain, you can now try to avoid these situations, or at least ensure you use coping mechanisms (such as relaxation) whenever you are in these circumstances.

Keep yourself comfortable



If you are in situations of discomfort, this can lead to increased perceptions of pain. This means that if something is bothering you, like bright lights or loud noises, deal with these problems to prevent pain from setting in. Also room temperature can have an impact on pain sensations, so make sure your environment is not too hot or cold.

A Note on Medication



Often people who report problems with pain following a head injury are given medication. Below are some simple guidelines to consider when taking prescribed medication, this list is not exhaustive and you should always consult your doctor if you feel you are having any problems with your medication.

If you are taking medication then:

- Never stop taking medication without consulting your doctor
- Always read and follow the instructions that come with medication carefully, and if you are confused then ask your pharmacist for advice
- If your medication makes you feel drowsy then do not drive or operate machinery
- Always consult your doctor if you are pregnant or intending to become pregnant, as some medication requires special monitoring during pregnancy.

If you are concerned about any medication, speak to your doctor or pharmacist. Alternatively, information can be found through:

NHS Direct - Tel. 0845 4647 - Website:

www.nhsdirect.nhs.uk

Patient UK - Website: www.patient.co.uk

British National Formulary - Website: www.bnf.org



Useful Websites:

www.headway.org.uk

- A useful web site with much information about brain injury and rehabilitation in the UK.

www.birt.co.uk

- Another useful web site concerning brain injury, with downloadable leaflets about brain injury and its implications.

<http://www.painonline.org/>

- A website devoted entirely to central pain, with information specifically for sufferers of central pain

<http://centralpain.org/>

- Another website with information specifically concerned with central pain

<http://www.painclinic.org/>

- Information about pain clinics in the UK, with information on what they do and where your nearest pain clinic is.

