

## **PAIN INFORMATION**

Pain is broadly divided into two types - **nociceptive** pain and **neuropathic** pain.

### **What is nociceptive pain?**

This is the type of pain that all people will probably experience at some time. It is caused by actual or potential damage to tissues e.g. a cut, a burn, an injury, a pressure or force from outside the body, or pressure from inside the body. The reason we feel pain in these situations is because tiny nerve endings become activated or damaged by the injury and this sends pain messages to the brain via nerves.

Nociceptive pain tends to be sharp or aching. It also tends to be eased well by 'traditional' painkillers such as Paracetamol, anti-inflammatory painkillers, Codeine and Morphine.

### **What is neuropathic pain?**

This type of pain is caused by a problem with one or more nerves themselves. There is often no trigger for the pain but the function of the nerve is affected in a way that it sends pain messages to the brain. Neuropathic pain is often described as burning, stabbing, shooting, aching, or like an 'electric-shock'.

Neuropathic pain is less likely than nociceptive pain to be helped by traditional painkillers. However, other types of medicines often work well to ease the pain (see below).

Note: you can have nociceptive pain and neuropathic pain at the same time, sometimes caused by the same condition.

## The Nature of Neuropathic Pain

Here are some terms that may be associated with neuropathic pain:-

- **Allodynia** - this means that the pain comes on, or gets worse, with a touch or stimulus that would not normally cause pain e.g. a slight touch on the arm from clothing or the power of water from the shower onto your upper limb.
- **Hyperalgesia** - this means that you get severe pain from a stimulus or touch that would normally cause only slight discomfort e.g. a mild prod on the painful area may cause intense pain.
- **Paraesthesia** - this means that you get unpleasant or painful feelings even when there is nothing touching you and no stimulus e.g. painful pins and needles or electric shock-like sensations.

In addition to the pain itself it may also impact on other areas of your life e.g. disturbed sleep, anxiety and depression.

## What is the treatment for neuropathic pain?

The aim is to try and treat the underlying cause of the pain. Various medications are used along with complimentary and psychological therapies.

## Medicines Used to Treat Neuropathic Pain

### **Simple analgesia and anti-inflammatory drugs**

Commonly used ordinary painkillers such as Paracetamol or anti-inflammatories like Ibuprofen are useful for nociceptive pain but are unlikely to ease neuropathic pain very much in most cases.

### **Tricyclic antidepressant medicines**

There are a number of antidepressant medicines in the 'tricyclic' group used as a common treatment for neuropathic pain. It is thought that they work by interfering with the way nerve impulses are transmitted. There are several tricyclic antidepressants and Amitriptyline is the one most commonly used for easing or reducing neuropathic pain. Others include Imipramine and Nortriptyline.

A tricyclic antidepressant may ease the pain within a few days, but it may take 2 to 3 weeks. It can take several weeks before you get maximum benefit. Some people give up on their treatment too early. It is best to persevere for at least 4 to 6 weeks to see how well the drug is working.

Tricyclic antidepressants sometimes cause drowsiness as a side-effect. This often eases in time. To try and avoid drowsiness a low dose is usually started at first, and then built up gradually if needed. Also, the full daily dose is often taken at night because of the drowsiness side-effect. A dry mouth is another common side-effect. Frequent sips of water may help with a dry mouth. See the leaflet that comes with the medicine packet for a full list of possible side-effects.

Do not increase or decrease the dose of your prescribed medication unless advised by your doctor or specialist nurse.

### **Other antidepressant medicines**

An antidepressant called Venlafaxine has also been shown in research trials to be good at easing neuropathic pain. Venlafaxine is not classed as a tricyclic antidepressant but as a 'serotonin and noradrenaline re-uptake inhibitor' (SNRI). It may be tried if a tricyclic antidepressant has not worked so well, or has caused problematic side-effects. The ranges of possible side-effects caused by Venlafaxine are different to those caused by tricyclic antidepressants (see the leaflet that comes with the medicine packet for a full list of possible side-effects).

Another group of antidepressants are called SSRIs (selective serotonin receptor inhibitors). There is some evidence to suggest that medicines in this group may help to ease neuropathic pain but more research is needed to confirm this.

### **Anti-epileptic medicines (anticonvulsants)**

An anti-epileptic medicine is an alternative to an antidepressant e.g. Sodium Valproate, Carbamazepine but the most commonly used are Gabapentin and Pregabalin. These medicines are commonly used to treat epilepsy but they have also been found to ease nerve pain. A low dose is usually started at first and built up gradually, if needed. It may take several weeks for maximum effect as the dose is gradually increased.

Do not increase or decrease the dose of your prescribed medication unless advised by your Doctor or Specialist Nurse.

### **Opiates and similar painkillers**

Opiates painkillers are the stronger 'traditional' painkillers e.g. Codeine, Morphine and related drugs. Another painkiller called Tramadol is similar but has a distinct method of action that is different to opiate painkillers. Opiates and Tramadol tend to be good at treating nociceptive pain. They also have a role in treating neuropathic pain, but may be less effective. In general, opiates and Tramadol tend to be used mainly if there are problems or side-effects with using antidepressant or anti-epileptic drugs.

### **Combinations of medicines**

Sometimes both an antidepressant and an anti-epileptic medicine are taken if either alone does not work very well. Sometimes an opiate such as Codeine is combined with an antidepressant or an anti-epileptic medicine. As they work in different ways they may complement each other and have an additive effect on easing pain better than either alone.

### **Capsaicin cream**

This is sometimes used to ease pain if the above medicines do not help or cannot be used because of problems or side-effects. Capsaicin is thought to work by blocking nerves from sending pain messages. Capsaicin cream is applied 3 to 4 times a day. It can take up to 10 days for a good pain relieving effect to occur.

Capsaicin can cause an intense burning feeling when it is applied but this side-effect tends to ease off with regular use. Capsaicin cream should not be applied to broken or inflamed skin. Wash your hands immediately after applying capsaicin cream avoiding eyes, mouth and genitals.

## **Other medicines**

Some other medicines may be used on the advice of a specialist in a pain clinic e.g. Ketamine injections (although normally used as an anaesthetic at low doses it can have a pain relieving effect) or Lidocaine (Lignocaine) gel which is applied to skin with a special 'patch'.

## **Physical treatments**

Depending on the site and cause of the pain you may be advised on one or more physical treatments including: physiotherapy, TENS machines ('transcutaneous electrical nerve stimulation'), acupuncture, etc.

Alternative physical therapies such as relaxation are also useful to help with your pain management.

## **Psychological treatments**

Pain can be made worse by stress, anxiety and depression. Also, the perception ('feeling') of pain can vary depending on how we react to our pain and circumstances. The Clinical Nurse Specialist offers sessions on treatment for anxiety, stress management, counselling, cognitive behaviour therapy, and alternative methods to help with pain management.

## **Further help and information:**

### **Action On Pain**

Helpline: 0845 603 1593

Web: [www.action-on-pain.co.uk](http://www.action-on-pain.co.uk)

A national charity providing support for people affected by chronic pain.

### **Pain Concern**

PO Box 13256, Haddington, EH41 4YD

Tel: 01620 822572

Web: [www.painconcern.org.uk](http://www.painconcern.org.uk)

Provides information and support for pain sufferers.

### **British Pain Society**

Web: [www.britishpainsociety.org](http://www.britishpainsociety.org)

A professional organisation, but their website has lots of information about pain and its treatment which is aimed at the general public.

### **Pain Relief Foundation**

Web: [www.painrelieffoundation.org.uk](http://www.painrelieffoundation.org.uk)

Has information on their website on many pain types.

### **Neuropathy Trust**

Web: [www.neurocentre.com](http://www.neurocentre.com)

Support for people with peripheral neuropathy and neuropathic pain.