

## **Overview of Chronic Pain**

Patients referred are experiencing on-going chronic non-malignant pain.

The service consists of an out-patient clinic, taking referrals from GPs, Consultants from other specialities within the Trust, Physiotherapy Extended Scope Practitioners and Consultants from outside the Trust. Medical and nursing staff may also require advice on chronic pain management with hospital in-patient's who may have complex pain management regimes.

### **Resources**

This brief overview of chronic pain provides an opportunity, through self-directed learning, to investigate and reflect on what chronic pain is, common chronic pain syndromes, the impact of chronic pain on patients' lives and treatment options available.

Information can be found in resource files and books throughout the department. Also, speak to staff, doctors, nurses and health care assistants about their experiences and views on caring for people with chronic pain.

### **Chronic non-malignant pain**

In 1986, the International Association for the Study of Pain (IASP) defined pain as:

‘an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage’

The IASP define chronic pain as:

‘Pain without apparent biological value that has persisted beyond normal healing time (usually taken to be three months)’

Bonica (1990) suggested that chronic pain was:

‘Pain that persists a month beyond the usual course of an acute disease or a reasonable time for an injury to heal, or, that it is associated with a chronic pathologic process that causes continuous pain, or the pain recurs at intervals for months or years’.

Many patients report that chronic pain has a severely limiting effect on their quality of life, causing high levels of disability and enormous demands on the health care system (NHS Quality Improvement Scotland 2006).

Acute pain may serve as a warning or protection against serious harm, but chronic pain serves no useful purpose. In some chronic pain syndromes, the

stimulus for the pain is constant or intermittent, for example, pressure on a nerve from a prolapsed inter-vertebral disc or pressure or tumour.

**Time out**

**What are the definitions of acute pain and chronic pain?  
Consider the differences between the two**

Patients are usually referred to the pain clinic when they have been thoroughly investigated and no cause has been found for their pain. Although a precise diagnosis of the cause of the pain may not be possible, it is important that all reasonable investigations are carried out. Sometimes, a diagnosis is made but surgery is either inappropriate, impossible or has failed, and pain management is the only option left.

Some patients complain of pain without any obvious tissue damage or disease. The pain is still very real to the patient, even though there may be a psychological element. Chronic pain touches every aspect of the patient's life, affecting their physical and mental health, and their families and relationships (Rowbotham 2000).

The pain clinic offers a multi-disciplinary approach to pain management, using a wide range of treatments, with the emphasis on improving quality of life not providing a 'cure'.

It is important that patients are involved and encouraged to take a pro-active role in their treatment programme, to prevent them developing a passive role, expecting everything to be done 'to' or 'for' them. It is vital that patients are able to take control of their pain in order to achieve maximum quality of life.

**Common chronic pain syndromes**

Chronic pain syndromes can be broadly divided into two groups though patients often complain of more than one type of pain:

Nociceptive pain includes complaints such as:

- Back and neck pain
- Muscular-skeletal pain (eg. fibromyalgia)
- Headaches
- Osteoarthritis
- Rheumatoid arthritis
- Post-operative and post-trauma pain
- Chronic pelvic and visceral pain

Neuropathic pain includes complaints such as:

- Post-herpetic neuralgia
- Phantom limb pain
- Trigeminal neuralgia
- Complex regional pain syndrome
- Painful peripheral neuropathies (eg. diabetic neuropathy)

**Time out**

**Select two of the above and look in detail at the possible treatment for a patient presenting with that chronic pain syndrome**

### **Assessment of pain**

Pain assessment is vital when planning the care of patients in pain. Without the initial assessment, it is impossible to measure the effectiveness of treatments. This becomes more difficult in an out-patient setting where patients will not be reviewed for months. New patients are assessed initially by a nurse specialist or doctor.

Effective communication skills are vital when assessing patients who may have been in pain for many years. Patients may be reluctant to discuss these complex issues. It is important to develop trust with the patient so that they feel able to discuss all elements of their pain and the impact it has on their quality of life. This will also help to ensure that the patient is able to take an active role in their treatment plan, and are more likely to be concordant in it.

**Time out**

**Consider the information that the nurse or doctor will need to discuss with the patient when taking a history in order to effectively plan a pathway of care for a patient in the pain management department**

### **Treatments**

The care pathway for chronic pain patients is multi-modal and tailored to the individual's needs. It will include many of the treatments summarized, and is constantly evaluated and changed according to the response of the patient.

### **Pharmacology**

Pharmacology may include simple analgesia, such as Paracetamol, and or opioids, with or without adjuncts such as non-steroidal anti-inflammatory

drugs, anti-depressants and anti-convulsants. Various combinations of drugs can be prescribed to meet the individual patient's needs.

### **Non-steroidal anti-inflammatory drugs**

Include diclofenac, ibuprofen. They decrease the production of prostaglandins.

### **Paracetamol**

The mode of action of Paracetamol is not fully understood. It is known to reduce prostaglandin concentrations in the brain and is an effective analgesic and anti-pyretic agent.

### **Opioids**

Include morphine, codeine, oxycodone, buprenorphine, fentanyl, tramadol. Opioid use in patients with chronic pain must be closely monitored by specialists.

### **Anti-depressants, anti-convulsants, and other drugs**

Neuropathic pain does not respond well to standard analgesia, but it does respond to drugs that were not originally intended for use in pain management.

### **Anti-depressants**

Include amitriptyline, dothiepin, seroxat. Anti-depressants do have analgesic effects for which they are prescribed in small doses. However, patients with chronic pain do sometimes become clinically depressed, and anti-depressants are prescribed to improve mood.

### **Anti-convulsants**

Include gabapentin, pregabalin, carbamazepine, and sodium valproate. The exact function of some of these drugs in pain management is still unclear. However, they do stabilise nerve membranes which has the effect of 'damping down' symptoms of neuropathic pain.

### **Miscellaneous drugs**

Include anti-spasmodics, such as baclofen and sedatives, such as diazepam (short term use only). These drugs are useful in reducing muscle spasm and the pain this causes.

### **Capsaicin**

Used topically as a cream called Axsain, the active agent in this treatment is chilli peppers. It is licensed for use in post-herpetic neuralgia and painful diabetic neuropathy.

### **Time out**

**Choose a drug from each of the categories of drugs, and investigate its use in chronic pain. Include its mode of action, doses, indications for**

## **use, contra-indications and side effects**

### **Invasive treatments**

If the pain is identified as mechanical, such as nerve compression, invasive techniques may be of benefit. However it must be made clear to the patient that this is not a cure. These techniques are highly invasive and are normally reserved for use if less invasive treatments have had no effect.

The procedures involve injection of steroids and or local anaesthetics, or injection of chemicals around nerves.

Procedures used in this hospital are facet joint injections, caudal epidurals, lumbar epidurals, guanethidine blocks, stellate ganglion blocks, chemical sympathectomise.

### **Time out**

**Choose one invasive procedure and investigate it's use in the treatment of chronic pain. Include the type of pain it is used to treat, related anatomy and possible risks and benefits to the patient**

### **Complementary therapies and psychology**

In chronic pain management, it is vital to formulate a treatment plan that will encompass the patient as a whole instead of a collection of symptoms. Complementary therapies and psychology involve the use of touch, relaxation and sensory stimulation and contact with the therapist that the patient with chronic pain has often been deprived of.

### **Psychological therapies**

Psychological factors in patients living with chronic pain affect both biochemical and neurophysiological aspects of pain mechanisms (Price 1999). Psychology must therefore be accepted as a vital area of the treatment of chronic pain as it may enhance the efficacy of other treatments (Wasan et al 2005).

Psychological therapies are aimed at enabling the patient to adopt ways of thinking and behaving that help them to manage their pain more effectively and enhance their quality of life when living with chronic pain. They include, education, cognitive behavioural therapy, diversion, relaxation techniques, stress management and guided imagery.

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**Time out**

**Investigate the ways in which patients with chronic pain, and their families and friends, can adapt their behaviour and lifestyle to enable them to improve and maintain their quality of life**

**Complementary therapies**

Many types of complementary exist and many people with chronic pain will source these therapies. Evidence suggests that there has been an increase in the use of complementary therapies for chronic pain (Haetzmann et al 2003). Complementary therapies must not be seen as a substitute for pharmacology or other conventional treatments. Careful assessment must be made to ensure that any complementary therapies used are both safe and appropriate for the patient.

Therapies used for pain management include acupuncture, reflexology, reiki, transcutaneous electrical nerve stimulation (TENS), aromatherapy, massage.

**Time out**

**Choose one of the complementary therapies mentioned above. Investigate its origins, mechanism of action, evidence base and possible risks and benefits for patients**

## References

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