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Chronic Pain

We often associate pain with some direct cause. It could be from a sports injury, or toothache, perhaps an accident which has resulted in a broken limb. For most of these there is a standard action and recovery process, with no pain once healed.

For many though, pain is something for which there is no simple “cause and effect” making it more difficult to fix the problem. Pain is a constant factor in the lives of many. The reason for this pain may be attributable to one or more different causes.

The 2006 National Disability Survey Ireland (CSO, 2008), stated that pain was one of the most common disability types reported. 50% of individuals reported pain as the main cause of their disability. 20% stated the pain disability was caused by an accident or injury. 13% of Irish population and 27% of Irish households are affected by chronic pain

What is Chronic Pain

Chronic Pain can be defined as pain which has lasted longer than what would be considered as “normal” healing time, perhaps as part of recovery from illness or injury; generally, more than 3 months. Chronic Pain may be attributable to an event such as an accident, developing from acute pain. In some cases, especially in relation to sports injury in contact sports, the underlying chronic pain may appear sometime after an event.

Surveys show that in Ireland, 35% of reported Chronic Pain was arthritis related. It may be site specific, (e.g. Back, Knee, Wrist) however 80% of sufferers in Ireland report that their pain relates to more than one site. The effects of pain can be widespread affecting the individual’s family life and employment and possibly leading to disorders such as anxiety and depression.

Types of Chronic Pain

Nociceptive Pain
Nociceptive pain is the type of pain which results from physical injury or damage to body tissue. This may be due to a fracture, injury or burn, or following surgical treatment such as following an operation. It can present as a sharp or stabbing type of pain, or as an ache. The pain can also be described as ‘gripping’ in nature. Lower back pain is the common form of this pain; 40% of all pain in Ireland is back pain. However, pain may also result from conditions such as osteoarthritis and osteoporosis.

Neuropathic Pain
Neuropathic pain is caused by damage of the nerves, spinal cord, or brain. Typical effects are felt as a burning or tingling type of pain. This type of pain can often be spontaneous, and can be felt as sudden shocks. Neuropathic pain can also be felt as hypersensitivity to touch or cold. Causes of neuropathic pain include nerve compression such as carpal tunnel syndrome and nerve damage for example from peripheral neuropathy due to diabetes or post-herpetic neuralgia following shingles (herpes zoster) infection.

Psychogenic Pain
Psychogenic pain is physical pain that arises from psychological factors, and is much less common as a stand-alone condition. Psychological factors and symptoms of psychogenic pain often complicate pain related disabilities although the pain has a physical cause, the psychological factors exacerbate or enhance the pain to be more severe than found in most individuals with a similar physical cause of pain. There can be a cyclic effect known as

chronic pain syndrome. This arises when an individual with physical pain becomes increasingly anxious about their pain. These psychological factors then increase the perception that the pain is more severe, which then causes increased anxiety and the cycle repeats. Treatment plans for this type of pain should include a mental health component, however, it should be recognised that although psychogenic pain has psychological roots, the pain that is experienced by the individual is real and has can have profound physical effects.

Causes of Chronic Pain

The cause of chronic pain is often difficult to determine with often many aspects to consider. It is this indeterminate nature which can present the biggest obstacle to health professionals to establishing proper diagnosis of the condition.

A general classification of the 4 main categories for pain are:

(1) Musculoskeletal pain

Causes of Musculoskeletal pain include Osteoarthritis; Rheumatoid arthritis; Osteoporosis; Ankylosing spondylitis; Polymyalgia rheumatic; Fractures; Chronic or repetitive overuse; Carpel Tunnel Syndrome and Muscular strains and Mechanical low back pain.

(2) Headache and/or Migraine

Causes of Headache and/or Migraine include Cluster Headaches**;** Migraine**;** Trigeminal neuralgia**;** Glaucoma**;** Smoking**;** Alcohol and Drug or Substance overuse or misuse.

(3) Neurological (nerve related)

Causes of neurological pain include Diabetic nerve damage (up to 25% of diabetics); Shingles; Multiple Sclerosis; Alcoholism; Thyroid disease and Pernicious anaemia; Infections (e.g., HIV)

(4) Psychological causes

Psychological causes of pain include Depression; Anxiety; Personality disorders and Sleep disturbances.

Diagnosis

The accepted pathway for someone who believes they may have Chronic Pain is to visit their GP in the first instance. The GP will use a standardised “question and answer” style approach to ascertain the exact nature of the problem. Pharmacists also use these questions to establish good quality recommendations.

It is important for the patient to provide the GP or other health professional with as much knowledge as they can regarding their symptoms and their impact of daily function. This will enable the health professional to make a better-informed decision as to next steps in terms of appropriate medication and/ or subsequent referral to a pain specialist.

If referred to a pain specialist including consultants across many disciplines esp. Migraine and Arthritis, the best thing a patient can do is to keep a diary, recording experiences, symptoms and any information at all to add value to their first appointment. Waiting times to see specialists are generally long (average currently at 2 years) and all too often, the outcome of the first appointment is to go away, complete a diary and come back; So, with resources extremely limited and waiting times so long, it is vital that people make as much as they can from their first visit.

Treatment

There is substantial evidence based on WHO figures that chronic pain is massively undertreated across the globe. Individuals with chronic pain often do not seek help with pain This occurs for a variety of reasons including religion, fear, finance, culture and a feeling that health care professionals may feel the individual's pain is 'imaginary'. Indeed, the fear of stigma and disbelief, especially with females is the most common reason in Ireland for not seeking help with chronic pain.

Medication:

The effectiveness of medication depends on the nature and severity of the pain. Types of medications, their benefits and potential side effects described below. Most medicines described in this article by me are only available on prescription from your GP; speak to your GP or pharmacist for more details.

Paracetamol

Can be used to treat pain anywhere in the body. Is considered generally safe without many side effects when used within recommended dose. Paracetamol does not have anti-inflammatory effects so may be less effective than NSAIDs for pain where inflammation occurs (eg) sprains and strains, arthritis. Rare side effects can include skin rash and kidney and liver problems especially if higher than the recommended dose is taken. Paracetamol can be used alone or with other drugs such as NSAIDs or a codeine-like opioid, such as co-codamol. Long term use of paracetamol and codeine combinations are not recommended (eg. Solpadeine®) as they can cause rebound headaches and addiction within as little as three days.

Non-steroid anti-inflammatories (NSAID's)

Generally used for more severe pain, evidence shows Ibuprofen to be highly effective. Oral forms include ibuprofen, diclofenac, etoricoxib, ketorolac, naproxen and celecoxib. Uses include lower back pain; hip or knee pain; osteoarthritis pain (pain that affects joints) and musculoskeletal pain (pain that affects muscles, ligaments and tendons and joints).

Side effects can include stomach pain; diarrhoea; heartburn; high blood pressure; rash and headaches and dizziness. In a small number of people, NSAIDs can cause heart problems. Over-use can be associated with serious bleeding. For this reason, do not use NSAIDs with aspirin. If you have asthma, there is a risk of it becoming worse when taking NSAIDs.

Topical non-steroid anti-inflammatory drugs (NSAIDs)

Topical non-steroid anti-inflammatory drugs (NSAIDs) can be in the form of a gel, cream or patches for example ibuprofen (Ibugel® Gel), diclofenac (Diclac® Gel) and etofenamate (Etoflam® Gel). They can be considered when treating localised musculoskeletal pain, particularly if unable take NSAID tablets. Should be used for a short time. They work directly on the affected area of the body. There is less risk of side effects as the medication does not go through the whole body but are less effective generally than oral versions. Side effects are rare but some people can get mild skin reactions, for example a rash.

Other topical medicines

Other topical medicines (medication applied to the skin in the form of creams, gels or patches), for example: capsaicin; lidocaine patch and rubefacients (substance that produces redness of the skin). They can be considered for nerve pain or musculoskeletal pain which hasn't improved with other medication, or if unable to t take other medication. They work directly on the affected area of the body. There is less risk of side effects as medication does

not go through your whole body. Sometimes topical painkillers can cause redness, itching, stinging, burning or other skin reactions.

Opioids
Opioids examples include codeine, dihydrocodeine, tramadol, oxycodone, hydrocodone, tapentadol, morphine, transdermal fentanyl, buprenorphine and methadone Opioids are generally reserved for more severe pain. Uses include chronic low back pain or osteoarthritis. They should only be continued if there is ongoing pain relief. Some opioids are weak (for example codeine) and some are strong (for example morphine). Because opioids can have serious side effects their long-term use should only be considered after a detailed discussion with GP. Common side effects include feeling sick; being sick; feeling dizzy; constipation; feeling sleepy; feeling confused; and breathing problems. Side effects associated with longer-term use of opioids include feeling lethargic; headaches; stomach problems (including constipation); urinary problems; reduced immunity to infections; hormone problems; dry mouth; over-sensitivity to pain or pain getting worse; addiction; mood changes; and sleep disturbances. Many come in patch form which may have less side effects than oral forms (eg) buprenorphine (Bu-trans®) patch.

Anticonvulsants
Anticonvulsants for example gabapentin (Neurontin®), pregabalin (Lyrica®) and carbamazepine (Tegretol®) are commonly used to treat epilepsy but they can also help nerve pain. They can stop nerve impulses causing some types of pain. Side effects may be worse in the first few days when your body is getting used to new medication. Side effects can include dizziness; drowsiness; weight gain; rash; dry mouth; feeling sick; and being sick. Less common side effects include swollen legs, blurred vision, headaches, diarrhoea and tremors (movement disorders).

Antidepressants
Antidepressants such as amitriptyline, duloxetine and fluoxetine in addition to helping people who have depression can help others with chronic pain. Amitriptyline can be considered for treatment of fibromyalgia (chronic widespread pain) and nerve pain. Duloxetine can be considered for treatment of nerve pain. Fluoxetine can be considered for treatment of fibromyalgia. They work by interfering with the way nerve impulses are transmitted and ease some types of pain. Different antidepressants have different side effects, and side effects are rare with some of them. When you first start to take amitriptyline or duloxetine you may experience dry mouth; feeling sick; dizziness; urinary retention; constipation; drowsiness; problems sleeping; anxiety; agitation; and problems with your central nervous system. Initial side effects often subside as your body gets used to the medicine.

Triptans (for migraine)
Triptans are highly effective, reducing the symptoms or aborting migraine attacks within 30 to 90 minutes in 70-80% of patients. Triptans target those neural serotonin receptors specifically involved in migraine attacks and can be used in the treatment of migraine with or without aura. All are available in tablet form with some brands also available as fast melt tabs, nasal spray or injection.

Triptans that are prescribed in Ireland include Sumatriptan (Imigran®), Zolmitriptan (Zomig®) and Frovatriptan (Frovex®). Studies indicate that in over 60% of cases, triptans give significant pain relief within two hours. Approximately 30% of patients experience complete pain relief within two hours of taking a triptan. Sumatriptan is especially effective in the treatment of cluster headaches (a severe form of headache more common in men)

Currently all triptans are prescription only in Ireland. Sumatriptan (Imigran®) is now available over the counter in pharmacies in the UK without prescription; in the UK, the patient requires a pharmacist consultation to see if it is suitable for them before they can purchase. There is call from Irish pharmacists for sumatriptan to move to over the counter in Ireland and the HPRA (Health Product Regulatory Authority) are likely to authorise this change at some point in the future.

Self Help

Pain Management Programme
Pain Management Programme (PMP) is a psychologically-based rehabilitative treatment for people with persistent pain. It is delivered in a group setting by an multidisciplinary team of experienced health care professionals working closely with patients. The main aim is to teach a group of patients with similar problems about pain, how best to cope with it and how to live a more active life. For most people, this treatment reduces the disability and distress caused by persistent pain through teaching physical, psychological and practical techniques to improve quality of life. It differs from other treatments provided in Pain Clinics in that pain relief is not the primary goal, although improvements in pain following participation have been demonstrated.

Physical or Physio-Therapy
Physical therapy covers several different treatment types, which can be beneficial for Chronic Pain, especially pain due to musculoskeletal disorders. A Chartered Physiotherapist can help with manual therapy which helps to increase tissue extensibility and range of movement, thereby decreasing pain. Manual therapy can also help with alignment and joint mechanics issues which can also help alleviate pain.

Therapeutic Exercise – such as hydrotherapy can restore joint movement and flexibility and strengthen and condition muscles to help movement thereby reducing pain.

Patient Education – can support physical therapy in a self-help or home-based manner. Reading and learning about their condition can assist in management of their own pain.

Exercise – Staying active can be the key to improving chronic pain symptoms; Any activity that increases mobility can have not only a positive physical benefit but also an affirming mental health benefit also.

Cognitive behavioural therapy (CBT)
CBT is a proven “talking therapy”, the primary aim of which is to how to recognise and manage negative thinking or unhelpful beliefs which lead to increased distress. Generally delivered on a “one to one” basis, the participant is taught techniques and strategies to enable them to challenge their thoughts, change their attitude leading to a change in future behaviour. Through regular attendance, confidence builds, leading to positive goal setting. These goals should relate to achieving resumption of activities previously restricted by pain. Learning problem solving strategies, stress reductions techniques will help bring a successful outcome.