

Information about Pain Management

Supporting Information Leaflet (3)



Clinical Genetics Department
Laboratory Building
Queen Elizabeth University Hospital

 **0141 354 9205**

Introduction

Pain can be a challenging symptom for people with a neuromuscular disorder. As muscles become weaker, gravity can pull joints into potentially damaging postures and this can cause pain.

Muscles gradually weaken as people get older but if they are already a bit weaker to start with, the ageing process can cause specific challenges to the joints.

In some cases the muscle condition in itself can cause pain if the muscles are inflamed, stiff or tight.

If you are unable to move frequently and change your position often, you may be more likely to experience pain from pressure as well as fatigue in your muscles, particularly the hips, back, neck and shoulders.

The way in which you deal with this pain is important and this leaflet will tell you about:

- **Understanding Pain**
- **What is Pain?**
- **Chronic Pain**
- **Types of Pain**
- **Different ways to help you manage your pain**

Understanding Pain

Pain can be a complex area to understand. No two people experience pain in the same way and for some a simple cut can be very sore while others can cope with serious surgery in much the same way. The amount of pain we feel is not always in proportion to the amount of tissue damage we see, and sometimes, there is nothing to see but the pain we experience can be significant.

What is pain?

Our body has many nerve endings called receptors that pick up pressure, pain and changes in temperature. These nerves send messages to our brain so our body can constantly monitor our environment. This means that if we are in danger, we are able to react quickly i.e. if something is hot our body will automatically let go of the hot object to avoid being burnt.

However, not all the messages we receive from these receptors are sent to the brain. For example we are not constantly aware of our clothes touching our skin.

If all the messages were sent to our brain then we would be receiving far too much information. It is important for our brain to prioritise these messages to allow it to respond to the ones that may cause us danger. The spinal cord works as a filter and will only send messages of pain to the brain when they reach a certain level that the body perceives as a threat to our health.

However, pain can be helpful. If an area is painful, then we naturally won't put weight on it or we will try and protect that area. This pain causes us to rest that part of our body to allow it to heal without further risk of damage. In some conditions, this is unhelpful as you need movement to help the pain and the healing process. Lack of movement may increase the pain you are experiencing.

Chronic pain

When pain persists, the brain will try to learn more about it and it will create more pain receptors to help do this. More pain messages are delivered to the spinal cord which reacts by sending more messages to the brain. The more messages the brain receives, the more intense is the pain reaction. This means that for some people who have been experiencing pain for a long period of time (chronic pain), only a small amount of movement or pressure can produce quite a large reaction.

In these cases we need to start thinking about how to teach the brain to cope with pain. Coping with chronic pain is about moving the pain you experience to a more manageable level and we call this Pain Management. We tend to think of pain in three ways:

1. **Frequency: How often do you have pain?**
2. **Intensity: How sore is the pain?**
3. **Duration: How long does each episode of pain last?**

The aim of pain management is to reduce the frequency, intensity and duration of your pain episode.

For example:

- if you have pain every day, perhaps it is possible to start working towards having some pain free days.
- If you have very intense pain (i.e. 9 or 10 on a scale from 1 to 10) then perhaps it is possible to bring this down to a 3 or 4, or,
- if you have pain that lasts for an hour, perhaps it is possible to shorten the length of time the pain is present.

You can do this in a variety of ways and it may be that you will need help from different healthcare staff.

Types of Pain

There are two specific types of pain:

1. Nocigenic
2. Neurogenic

Certain medications work better with either one or other of these types of pain.

Nocigenic Pain

Nocigenic pain is a result of stimulation of certain receptors in bones, joints and muscles (called nociceptors). These nociceptors are sensitive to tissue injury. People describe nocigenic pain as being sharp, aching or throbbing. This type of pain is a result of trauma (a strain or sprain), pressure or osteoarthritis and it responds well to painkillers such as Paracetamol and NSAID's (non steroidal anti-inflammatories) such as Ibuprofen.

Neurogenic pain

Neurogenic pain is due to a problem with the nervous system. The nerves may not work properly and can cause a burning sensation, a hypersensitivity (i.e. people may feel pain on light touch) or you may feel different sensations like, tingling, numbness or there may even be a complete loss of feeling. This type of pain occurs due to problems with the nerves (nerve dysfunction) or a disorder of the nervous system (neuropathy) such as in diabetes or Charcot Marie Tooth disorder. It responds best to medication such as antidepressants or anti-epileptic drugs. Both types of pain may co-exist and both are affected by factors such as fatigue, depression or emotions such as anger, anxiety and stress.

How to manage your pain

There are different ways to help you manage your pain and this may involve different health professionals. However, managing pain requires your involvement in the treatment process and you may need a few different approaches.

Assessment

The first stage is assessment. Finding the cause of the pain is key to finding the best treatments. Each health professional will assess your pain from a different perspective to make sure your pain is being treated and managed in a holistic way.

For example:

- a physiotherapist may look at posture and movement and determine if this is the cause of your pain;
- an Occupational Therapist may look at equipment to see if using something that makes a job a bit easier on your body can help reduce the pain;
- a Doctor may assess you to see if certain medication will help improve your pain levels.

Physiotherapy and Postural Management

Adapting the way in which you do certain tasks may help reduce your level of pain in the short term and help you maintain manageable pain levels in the long term. Your physiotherapist will assess your:

- Static posture (sitting, lying and standing)
- Dynamic posture (walking, stair climbing, housework etc). Please refer to Supporting Information Leaflet (4): Postural Management for more information.

Your physiotherapist can help you understand the way in which your muscle groups work and how weak muscles can alter the way in which you do things. In other words, some activities require more energy than others. In these circumstances, fatigue sets in quicker, and your joints and muscles take the strain, which may lead to pain. Altering the way in which you do things can help break this cycle. Changing both your static and dynamic postures and

introducing pacing or fatigue management techniques are both helpful. We call this energy conservation which is an important treatment strategy when managing chronic pain.

Heat, cold, vibration, massage, acupuncture or Tens machines are all useful strategies in dealing with pain and your physiotherapist can advise on the best method to help specific pain.

Movement is crucial in joint and muscle health, even when your ability to exercise is limited. A physiotherapist can work with you to practice activities as well as specific and focussed stretching that you can do on your own either in your home or community i.e. health centre or local gym. These strategies require active participation and also need to be sustainable by you i.e. you need to keep them going even if the pain has gone to help prevent future episodes of pain. In some cases, you may need a few physiotherapy sessions until the pain settles and you have become used to changing how you carry out day-to-day tasks.

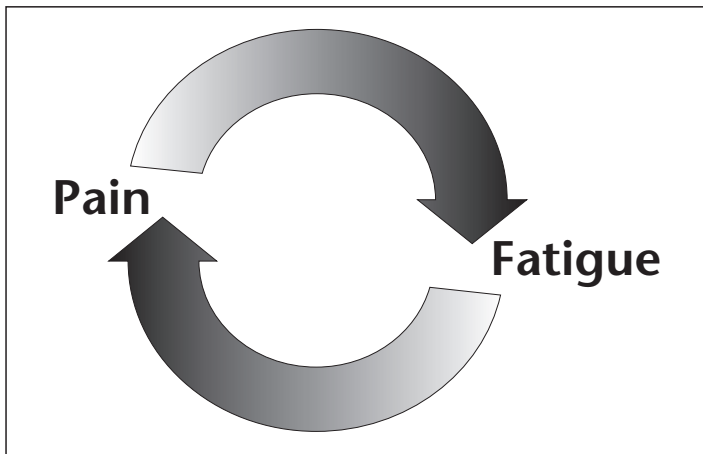
Relaxation

Techniques that help the body relax such as deep breathing and meditation can also help to ease pain. When you are stressed, there is tension in your muscles causing your pain receptors to be more easily stimulated and you become more aware of your pain. Learning relaxation techniques is important and there are many methods available to help. You can find out more about relaxation methods from your physiotherapist or occupational therapist.

Fatigue

There is a strong link between fatigue and pain. When muscles are fatigued, they are not supporting the joints as well as they should and this can cause or exacerbate pain (Please refer to Supporting Information Leaflet (1): Fatigue Management). If pain persists, this can cause fatigue as it interrupts your sleep.

Dealing with pain on a day-to-day basis can be exhausting and cause you to adopt poor postures in order to find a way to ease the pain. Poor posture can cause further pain as you are asking your muscles to work in a way that they are not used to, so the muscles will fatigue. When our bodies are tired, our pain and pressure receptors are more easily activated i.e. the pain we are experiencing will stimulate more pain receptors than on a day when we are less tired, and the body will experience higher levels of pain. When we are in pain, it is more difficult to sleep which makes us feel pain more acutely and the pain-fatigue cycle starts. It is important to address this pain and fatigue cycle early as the longer it goes on the more difficult it is to break.



Aids and Adaptations

If you are finding that it takes two or three attempts to do certain tasks (e.g. getting up from a chair, sitting up in bed, working above head height), you should change how you do things as you are using too much effort which puts more stress on muscles and joints. An occupational therapist may suggest some easier ways of doing the same task or be able to suggest aids or equipment that may make life easier.

Healthy Lifestyle

A healthy well-balanced diet is important to help the body repair itself. Maintaining a healthy weight will take stress off the joints and muscles. Eating a variety of fresh fruit and vegetables, lean protein and a selection of carbohydrates such as potatoes, rice or pasta can help improve energy levels.

Cutting down on the amount of alcohol you drink can help. Alcohol interferes with sleep and many people already experience sleep problems when they have chronic pain.

Smoking can make pain worse as it affects your circulation. It may be difficult to cut down or stop smoking when pain is present but there is help available via your G.P or chemist if you want to stop smoking.

Sleep

Getting enough good quality sleep is essential when managing pain. If you are tired, it is more difficult to cope with pain levels through the day and the body is not sufficiently rested to repair itself (please refer to Supporting Information Leaflet 7: Sleep Management).

Medication

You may need to try different types of medicine and dosage to find out what works best for you. We have to introduce new medication carefully as certain medications may interfere with other medications that you already take. Your Doctor, Nurse or GP can give you advice on pain medication.

Psychological Factors

Coping with ongoing pain can be difficult and the way in which you deal with it is important. Sometimes it can help to speak with others who are experiencing similar challenges and there are various local support groups throughout the West of Scotland.

Mood

Our mood also plays an important role in how we experience pain. If our mood is low or we are feeling stressed, rushed, frustrated or sad, our pain receptors are more easily activated. Once our pain receptors are activated, our brain responds by paying more attention to the pain which in turn makes it worse. Many people find that distracting themselves by moving around, phoning or meeting someone, undertaking a hobby or doing something that will take your mind off your pain can make you feel so much better. Try and lift your mood by focussing on something you enjoy. When we are happy, contented and feeling at peace with ourselves, we cope with pain much better.

Sometimes, a psychologist can help by helping you develop new coping strategies. Understanding your chronic pain and developing techniques to help deal with it can help to improve your quality of life.

Cognitive Behavioural Therapy (CBT)

Another approach to help with pain management is cognitive behavioural therapy (CBT). CBT can help change the way you perceive pain and with practice can help you change the response your brain makes to pain. CBT helps to promote a problem-solving attitude. Often you can feel helpless when you have pain but changing that feeling of helplessness to a feeling of being in control can significantly reduce your pain levels.

Conclusion

There are many different ways of managing your pain and usually a combination of methods is most successful. However, you will need to be willing to try these different methods to help manage your pain. The staff will be there to support you.

Further Information

For further information, please contact Marina Di Marco, Principal Physiotherapist.



marina.dimarco@ggc.scot.nhs.uk



Telephone: 0141 354 9205

