

Musculoskeletal Physiotherapy Outpatient

Department Self-Management for Persistent Back Pain

Advice Leaflet

This information supports the physiotherapy management of your low back pain.

Aims of physiotherapy sessions:

- To enable you to manage your pain better through education and exercise. Evidence suggests improved knowledge of pain mechanisms, cardiovascular fitness and core strength can enable you to do more and feel better.
- To enable you to restart activities you would like to be able to do more easily by setting achievable goals. This will ensure the sessions are specific to you.

Understanding why you feel what you feel

When back pain is present every day, and can vary within each day, it can be difficult to know how you will be able to cope with everyday activities, exercise and life in general. The following mechanisms and implications are important to understand.

Pain Mechanisms

Pain is useful. It is essential to warn about actual or potential danger/harm. All types of pain are felt in the brain and nervous system. Our brains are continually developing and learning from experiences. They can therefore be retrained.

Everybody's experience of pain is very different and cannot be shown on a scan. Often investigations such as an X-ray or MRI scan do not consistently agree with the level of pain you perceive. Whilst investigations can provide important information, what you are feeling and how it affects you is more important.

There are different types of pain:

- **Acute pain is short-term pain**
It may last seconds, or weeks but does eventually stop. Acute pain is very often a warning sign that tells us something is wrong. This pain may ease by itself or need a short period of healing over a few weeks.
- **Persistent pain is long term pain**
Often there is no clear explanation why the pain is continuing. Once more serious causes of the pain have been ruled out persistent pain is not a warning signal of new damage to your body. It is more complex and can be due to changes in the nerve endings continuing to send pain signals even though no new damage has occurred.

What causes persistent pain?

The nervous system will decide something is painful depending on the level of actual or potential harm that could occur. When you have been in pain a long time, everyday activities that you were previously able to complete pain free, can cause pain, as the nervous system has become more sensitive.

Gentle movement, light pressure, sitting postures can begin to trigger a pain response which didn't before.

Although persistent pain often starts with an injury, pain can continue once the original damage has healed. Following an injury, it is a normal reaction to rest and protect the area. We limp or move differently. However once the tissues have healed these protection mechanisms, if continued, can become unhelpful. Unfortunately, these behaviours become habit and can be difficult to change. Changes to our emotions due to pain also occur.

It is understandable to feel stressed, anxious, fearful. However, these emotions can cause chemical reactions in the body which continue to increase pain levels. Poor sleep/fatigue has also been shown to increase chemical reactions and therefore increase pain.

Treatment strategies for persistent pain

Treatment strategies that are useful in acute pain become less useful in persistent pain management. The original cause of your pain becomes less important as time goes on.

Medications are useful to enable you to get going but then more active forms of treatment become more helpful. Medications can then begin to be reduced.

Exercise is an important part of pain/condition management. Finding the right type and the right level of exercise for you as an individual is very important. If either of these are not correct for you, then the chances are that you will either find that exercise seems to increase your pain, or that you simply are struggling to fit it into your daily routine. Exercises can be progressed once you have found what is right for you.

Pacing and Activity management is another key skill that you may have already been using. Many people feel that they have had to dramatically reduce or cut out a number of activities from their daily life, or that trying to do those activities can increase their pain. Finding new ways to adapt routines and build up activity is a key element in maintaining or increasing your levels of activity and enjoyment of everyday life.

Relaxation can be an extremely active way of treating persistent pain. Like many other techniques when practised regularly it becomes more beneficial and used well it can provide an instant source of both pain reduction and mood control in difficult situations or when pain increases. Relaxation can also help you sleep better.

Summary

You are in control of all the above techniques and can adapt them to your own needs. This should enable you to find the best strategies and independently cope with your pain. There are many other strategies such as physiotherapy treatments (massage, manipulation, TENS, ultrasound, traction), acupuncture or medical interventions that have been shown to offer *short term relief*. It is important to also develop strategies you are in control of and can use as soon as you need them. The emphasis will therefore focus on exercise and pacing in order to provide you with a long-term management plan

Further Information

You may find the following websites useful for further information about back pain:

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- National Institute for Health and Care Excellence: Low back Pain and sciatica in over 16s: assessment and management.
<https://www.nice.org.uk/guidance/ng59/ifp/chapter/Low-back-pain-and-sciatica-the-care-you-should-expect>
- The Chartered Society of Physiotherapy <https://www.csp.org.uk/publications/10-things-you-need-know-about-your-back>
- Versus Arthritis <https://www.versusarthritis.org/about-arthritis/conditions/back-pain/>
- Back Care <http://www.backcare.org.uk/wp-content/uploads/2015/02/Exercises-for-Back-Pain-Factsheet.pdf>

Exercises for Persistent Lower Back Pain

Pelvic Tilt

Lying on your back with knees bent and arms by your side. Imagine a bowl of water on your stomach. Try to tip the water out the bowl towards your head and shoulders.



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Gently push through your heels. Feel you are using your gluteal (bottom) muscles and your abdominals (tummy) muscles to allow you to move BUT DO NOT hold tension in these muscles or hold your breath.

Feel each vertebrae move in turn from your tailbone to your middle back as you tilt up, from your chest to your tailbone as you relax back down.

Repeat 5 - 10 times.

Lumbar Spine Flexion

Lying with your knees bent and feet flat on the floor. One at a time, bring your knees closer to your chest to let your lower back round.



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With both knees now in this position, draw your knees to the position where your back feels most stiff and gently rock your knees closer to your chest 10 times.

Keep your head and neck relaxed. Do not push through pain. Put each leg down to the ground one at a time. Maintain control of your lower back (keep your core muscles engaged /working) as you lower your legs back down. Do not allow your back to arch off the bed/floor.

Repeat 2 - 3 times. You should feel your back loosen the more you do.

Standing Pelvic Tilt Against a Wall

Bend knees slightly and breathe out while tilting your pelvis backwards to flatten your lower back against a wall.

The back of your head should be stretched upwards with your chin in. Keep your shoulders and neck relaxed.

Hold for approx. 20 seconds. Stand tall. Relax, but maintain length of spine. Repeat 2 -3 times.



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