



Musculoskeletal Physiotherapy
Information for patients

Management of Back Pain



Back pain is a very common complaint, which most of us will suffer from at some stage in our lives. Most back pain does not have a serious cause and can come on for no reason. You can help to manage your back pain by:

- Keeping active
- Improve your general fitness
- improve your posture and move more often

Your spine is a mobile structure made up of 24 bones stacked on top of each other. It is held together by joints, ligaments and muscles to form an 'S shaped' curve. Your spine is strong and flexible and able to still withstand the demands placed on it during normal daily activities.

When to seek further help:

Very occasionally, some patient's with severe back pain may develop Cauda Equina Syndrome. This is a very serious complication and if you develop any of the following warning signs, you must seek emergency medical help immediately.

You may not develop all of the following signs and they could develop in any order

- Loss of feeling / pins and needles between your inner thighs or genitals or numbness in or around your back passage
- Altered sensation when wiping yourself with toilet paper
- Increasing difficulty when trying to urinate
- Increasing difficulty in stopping or controlling the flow of urine
- Loss of feeling when you urinate or empty your bowels
- Recent leaking of urine or needing to use pads
- Not knowing if your bladder is full or empty
- Inability to stop a bowel movement or leaking
- Recent changes in either sexual function or loss of sensation in genitals during sexual intercourse

If any of these warning signs develop following the onset of your back pain, you should attend your nearest Accident and Emergency Department.

Keeping active

People with back pain find it beneficial to keep active and move regularly. Pain can often increase when you stay in one position too long. Try moving at least every hour and change your position, even if just for a couple of minutes. During a flare up, you may need to move more often than this. For example, if you sit a lot during the day, stand up at least once every hour and walk around the room.



©Physiotools

Posture

Research has shown that there is not a strong relationship between posture and back pain and it is more helpful to get up and move regularly. It is the length of time that you sit for that is important, rather than how you sit. Try to get up and move at least every hour.

Some people may find it helpful to sit in a better position. If you think this might be useful, try the following tips:

- Sit in a seat which supports your lower back. You can use a rolled up towel or a small cushion to provide extra support for your lower back.
- Avoid soft low chairs and avoid sitting on the edge of a chair without support.
- Do not cross your legs.
- Lengthen your spine and sit up tall, without over arching your back or leaning forwards. You should not feel lots of tension in your back.

Posture can be helpful in managing back pain, but it is more important to move regularly.



Display Screen Equipment

Using display screen equipment (DSE) such as computers may increase your back pain. It can be helpful to set up your work station correctly, but it is still very important to get up and move regularly- at least every hour.

You may find the following guidelines helpful:

Screen:-

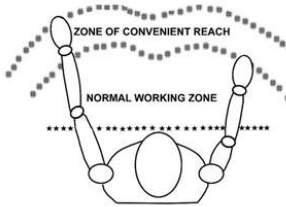
- At arms length away (50 – 70cms), directly in front of you.
- The top of the screen should be just below eye level. You

should have a comfortable viewing angle to the middle of the screen. A screen step or swivel arm may be required.

- At 90 degrees to light source to avoid glare.
- Avoid letting your head and neck drift into extreme positions.

Chair:-

- Use an adjustable chair, raise or lower it, so that your elbows are at 90 degrees and your forearms are level with the desk/keyboard.
- Relax your shoulders, rest your forearms on the desk to allow your shoulders to relax and keep your wrists in line with your forearm.
- Keep arms by your side in line with your body.
- Adjust the back rest to provide support in your lower back.
- Sit right back in the chair to get support, have the chair close to the desk.
- Keep feet flat on the floor – if not use a foot rest. Hips and knees should be close to a 90 degree angle.



Desk:-

- Ensure you can pull your chair under the desk.
- Avoid storing bags, bins, files, mobile pedestals etc. under the desk to limit leg access.
- Remove equipment from desk e.g. disc drive, printer.

Keyboard:-

- Keep wrist and fingers in line with forearm. Avoid bending the wrist back.
- Ensure there is enough space on the desk in front of the keyboard to rest the wrist when not keying. Remember not to

rest your wrists when keying.

Mouse:-

- Keep within easy reach, in your normal working zone, close to the keyboard.
- Avoid gripping.
- Minimise use of mouse where possible. Use keyboard shortcuts.

Normal working zone:-

Your arms remain by your side and frequent tasks should be undertaken within this area e.g. keyboard use, mouse use, written work.

Zone of convenient reach:-

Objects such as phone, filing trays should be stored within this area to avoid over stretching.

Documents:-

-Using a document holder is recommended. This should be between the keyboard and mouse or at the same level as the screen, close to the monitor. If documents are placed flat on the desk, you are more likely to drift into a poor position Books can be placed on a sloping surface to elevate them (e.g. ring folder).

Laptop:-

- Always use your laptop on a stable base, do not use your laptop on your lap.
- Use a separate keyboard and mouse if possible.
- The laptop should be raised up and tilted on a stand or place on some books so the screen is at the correct height.

Telephones:-

If you use a telephone a lot at work, a headset is recommended. Avoid holding the phone between your head and shoulder.

Driving

Do adjust your seat to sit yourself upright. You should be close enough to the steering wheel that when your foot is on the accelerator, your knee is bent to about 30 degrees.

Do use a towel to support your low back if this helps.

Do keep your arms relaxed, with your elbows slightly bent and gently grasp the wheel.

Do take regular breaks to stretch or move every 30 minutes.

Do lean forwards slightly when reversing and turn from your trunk and shoulders first, before turning your neck.

Do take breaks when driving long distances.

Lifting

Research has shown that for the majority of patients, lifting is not the cause of their back pain.

Teaching people how to lift in a particular way has not been shown to be effective in reducing the occurrence of back pain. Your body knows how to lift and trying to change the way you lift after years of doing it a certain way may not be helpful. Like any exercise, you should increase the weight you are lifting gradually to allow your body to strengthen and get used to it.

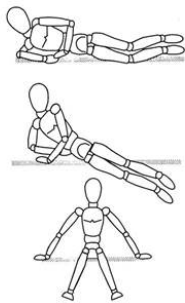
The important factor in lifting is to keep the object as close to you as possible.

When carrying things, it may be more comfortable to use a backpack to distribute the load evenly on both shoulders, to make more regular trips such as unloading the shopping from the car, or use a wheeled suitcase when on holiday.

When carrying children, swap sides regularly. Try to use carriers such as slings or backpacks or a pram. Avoid carrying the baby in the car seat as this adds extra weight. Leave the seat in the car. When the child is old enough, encourage them to climb in, rather than lifting them in to the car.

Housework/ gardening

- Spread out your chores over a few days, you should not try to do everything on one day
- Vary the tasks that you do, so that you alternate between different positions and loads on your back and take regular breaks
- Try to keep upright when hoovering or mopping, move your feet so that you are not over reaching and clean a small area at a time
- When making beds, it can be helpful to kneel down or place one knee on the bed. It may help to change the beds on different days to spread the load over the week.
- Kneel on your hands and knees or half knee with the other leg bent up when you are weeding.



Sleep

Do have a supportive mattress. There is no ideal mattress, you need to try different ones to feel which is comfortable, but it is usually better to avoid soft, old mattresses.

Sometimes lying on your side with a pillow between your knees can be more comfortable, or lying on your back with a pillow under your knees.

Easiest way to get out of bed

- Lying on your back, bend your knees and roll onto your side.
- Get up sideways, bringing your feet over the edge of the bed, at the same time push with your arms and sit up.
- To lie down do the reverse.

During an acute episode of back pain

- It is not unusual for back pain to vary over time and for you to have a flare up of pain
- Try not to panic, acute back pain will probably get better by itself if managed properly.
- You may need to rest or reduce your normal activities for a few days. However, bed rest for more than 24-48 hours is not helpful. It can stiffen and weaken the muscles and joints which could prolong your symptoms.
- Try to continue doing your exercises, even if have to reduce the number that you can do.
- The sooner you get moving the sooner your back will feel better. Build up your activities gradually. Try to stay at work or go back as soon as possible. If necessary you could ask to do lighter duties for a week or two.

Heat packs

- Heat can help to relax the muscles and give you some temporary pain relief. Try a hot water bottle, bath or shower. Make sure the hot water bottle has a cover or is wrapped in a towel and is **warm**, not hot.

Cold packs

Some people prefer to have something cold on their back. Wrap a bag of frozen peas in a damp tea towel and sit with this on your back for 10 minutes to give you some pain relief. Do not place the frozen bag directly on to your skin.

Painkillers

- It may be helpful to take painkillers or anti-inflammatory tablets. If in doubt, check with a GP or pharmacist first.

Relaxation

Feeling stressed or anxious may make your back pain feel worse. Practicing relaxation techniques such as deep breathing exercises, listening to music or mindfulness may help you to manage your back pain.

Positions of ease



Some people find the following positions useful to rest in for short periods of time:

Back

Lie on the floor with your legs resting on a chair or lie with a towel rolled up supporting the small of your back.

©Physiotools



Side

Lie with a pillow under your knee or between both knees.

©Physiotools



Front

Lie on your tummy or over one or two pillows.

©Physiotools

Improve general fitness

Movement is good for your back. Exercise has been shown to be the most important thing you can do to manage your back pain in the long term. Any form of exercise can be beneficial in managing your pain, for example; walking, swimming, cycling, going to the gym, yoga, pilates or tai chi, but there are many other things you can do. Exercise can be any activity that increases your heart rate so you are slightly out of breath (a good test is if you can still hold a conversation). The stronger, fitter and more flexible your body is, the better your spine can adapt to the normal day to day demands placed on it.

When you exercise, your body produces more pain relieving hormones such as serotonin, endorphins and dopamines. These are your own natural painkillers. Many people with back pain feel better when they are exercising on a regular basis.

However, it is important to do something that you enjoy, otherwise you are unlikely to keep it up long term. Your body will produce more of the natural hormones if you are enjoying it at the same time.

It is important to build up the level of activity gradually, so that your body gets used to doing the new activity over a period of time. You may find it useful to set yourself goals to help you with this. Aim to eventually exercise for between 20 – 30 minutes every day.

Exercises

It is also helpful to do specific stretches to keep your back flexible. Try to move your back in all the different directions, starting at the level you feel comfortable, with a level of pain you can manage. If they are too easy, you can always progress to the next level.

Gradually work through the levels as you feel able to. It is good to hold the stretch for 20-30 seconds, but to begin with, even holding it for a few seconds will help. Repeat up to 10 times, starting at a number you are comfortable to do.

Choose one exercise from each section.

Section 1: Back Arching / Extension

We spend a lot of time bending forwards, so it is good to stretch our backs in the opposite direction to keep it supple.

Choose one of the following positions to stretch your back.



Lying face down, leaning on your elbows/forearms.

Arch the small of your back by pressing your pelvis and stomach to the floor. Now bend your upper back upwards, keeping forearms on the floor.

©Physiotools



Lying face down with both your hands at shoulder height.

Straighten your elbows and lift your upper trunk as far up as you can. Keep your pelvis and legs relaxed.

©Physiotools



Stand straight with feet apart.

Support your back with your hands while bending your back as far backwards as possible. Keep your knees straight during the exercise.

©Physiotools

Section 2: Back Twisting / Rotation

Our backs can get stiff in this direction when we have back problems. Doing this gentle stretch helps the back to move more normally.

Choose from one of the following positions.

Lying on your back with knees together and bent.



Slowly roll your knees from side to side keeping your upper trunk still.

©Physiotools

Lying on your back with one leg bent.



Bring your bent knee over the other leg and push your knee against the floor with the opposite hand. Then reach with the other arm to the opposite side looking in the same direction. You will feel the stretching in your lower back and bottom. Hold approx. 20 secs. - relax.

©Physiotools



In sitting, place your hands across your chest and then twist round to one side and then the other

©Physiotools

Section 3: Back Bending / Flexion

We often avoid bending when we have back pain but this is not helpful. If we lose this movement it can become painful. Slowly stretching into this movement will ease pain.

Choose from one of the following positions.



Lying with your knees bent and feet on the floor. Lift your knees towards your chest.

Place your hands behind both knees and draw them towards your chest.

©Physiotools



Sit with your feet firmly on the floor.

Round your back and bend forward, keeping your neck and shoulders relaxed.

©Physiotools



Crawling position.

Arch your spine upwards while letting your head relax between your arms.

©Physiotools



Stand.

Round your back and bend forward, keeping your head and shoulders relaxed.

©Physiotools

Section 4: Back Strengthening

It is important to try to keep your back strong. Try these exercises below, starting at the level you feel comfortable. Build up to doing all of them. Decide on the number of repetitions you feel comfortable doing, even if it's just a few to start with and gradually build up to 3 sets of 10 with a short rest between sets. You may then be able to progress to the next level.



Lying on your back with knees bent and arms by your side.

Tighten your stomach muscles and press the small of your back against the floor letting your bottom rise. Hold 5 secs. - relax.

©Physiotools



Lying on your back with knees bent and feet on the floor.

Lift your pelvis and lower back (gradually vertebra by vertebra) off the floor. Hold the position. Lower down slowly returning to starting position.

©Physiotools



Sitting with your arms crossed.

Stand up and then sit down slowly on a chair. (This can be made easier and more difficult by changing the height of the chair)

©Physiotools

So remember:

- You should try to keep active and return to your normal activities as soon as you can.
- Doing some general exercise to keep you fit and strong may help your back pain and your physiotherapist will give you some specific exercises to help improve the mobility of your spine.
- Try not to worry about your back pain as being anxious may make your back pain feel worse.



For further information

Please ring our Booking Office on **0191 4452643** or visit our website at: **www.tims.nhs.uk** which provides online guidance and support on managing your musculoskeletal (MSK) condition effectively.

The NHS website also provides trusted online information and guidance on all aspects of health and healthcare to help you manage your condition and/or inform your choices about your health: **www.nhs.uk**

Feedback

We also welcome feedback from patients about their experiences with our service and this can be done through our patient advice and liaison (PALS) team on **0800 032 0202** or **northoftynepals@nhct.nhs.uk**

Further Information

Some useful websites to look at:

-The truth about low back pain Keele University AXA PPP **www.youtube.com/watch?v=bcBtPSf0Hc**

- Low Back Pain – Dr Mike Evans **<https://www.youtube.com/watch?v=BOjTegn9RuY>**

-90:10 The single most important thing you can do for your stress Dr Mike Evans **<http://www.youtube.com/watch?v=l6402QJp52M>**

-10 things you need to know about your back - **www.csp.org.uk/yourback**

http://www.csp.org.uk/sites/files/csp/secure/001446_spinedumbell_a4.pdf

- **<http://www.nhs.uk/LiveWell/Pages/Livewellhub.aspx>**



Tyneside Integrated Musculoskeletal Service

TIMS is a partnership between Newcastle upon Tyne Hospitals NHS Foundation Trust and Gateshead Health NHS Foundation Trust

Information provided by Senior Physiotherapist
Review date: October 2020