PhysioMed

In touch with the way you work

Maintaining a **fit** and **healthy** workforce

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People are your most **valuable** resource. How your people act and perform is what **sets you apart** from your competition.”

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FOREWORD

It’s a well-known fact that the UK has an ageing workforce and this presents a number of challenges. In some industries the levels of sickness absence due to musculoskeletal conditions reaches 40% and then there is the added issue of Presenteeism - where employees are at work but injured and in pain and therefore less productive. Overall, 31 million working days are lost to business every year due to musculoskeletal injuries (MSDs) and long-term sickness absence is estimated to cost the UK economy £8 billion a year.

These are shocking statistics - and it gets worse. An injury can become chronic within 12 weeks and yet, despite medical evidence showing that early physiotherapy intervention on MSDs can prevent this and promote swifter recovery, faster and safer return to the workplace and improved productivity levels, the average waiting time for NHS physiotherapy treatment is more than 14 weeks.

We are often asked what the benefits are of providing occupational health physiotherapy to businesses. The answer is simple. Having happy and healthy employees increases overall productivity, reduces sickness absence and contributes directly to the bottom line. So our clients, and their businesses, benefit directly from having happy and healthy employees – and so do they.

We are continually working to improve our service, developing our blended approach and working closely with HR and OH departments to ensure our clients have the best human resource available to them.

The information in this book has been developed to contribute towards that, and to make sure you have the healthiest and most effective team in your industry.

Phil Clayton

Managing Director

AWARD WINNING PHYSIOTHERAPY SERVICE

Providing a professional, responsive, cost effective service that delivers reduced sickness absence, increased productivity and improved employee health and wellbeing is at the heart of everything we do at Physio Med.

We build very close relationships with our clients to ensure our service has a strong and positive impact on their business and their staff and we are always keen to work with them to promote the service in any way we can, both internally and externally.

One of the ways we do this is by entering awards and supporting our clients in entering – and winning – awards across a range of business sectors including physiotherapy, occupational health, healthcare and human resources.

We are very proud that our work has been recognised by a number of key organisations in recent years, including by our own industry body – the Chartered Society of Physiotherapy (CSP).

Physio Med's service won the Promoting Self Management award at the CSP's Service Excellence Awards – which recognise and reward the best examples of service delivery in the industry. Dr Helena Johnson, chair of Council at the CSP, said at the time that the CSP was always keen to acknowledge services that show innovation and excellence in getting staff well and back to work quickly and saving money for employers.

In 2016 Physio Med has been shortlisted in the Yorkshire Business Masters Awards in the Innovation category, in recognition of the unique blended approach we take.

But perhaps most importantly we have supported a number of clients in winning awards which recognise the service we help them to provide to their employees.

In fact our clients have been shortlisted in the Rehabilitation First Awards, Employer Rehabilitation Initiative of the Year category, for each of the last four years and have WON it for the last three years. The customers that have secured wins in this category include John Lewis Partnership, North East Ambulance Service and St Helens and Knowsley Teaching Hospitals NHS Trust.

Helping our clients to win awards is a key part of our relationship with them as it provides a platform for them to demonstrate their strengths as an employer, highlight the health and wellbeing benefits on offer to staff, and show stakeholders and peers how they are delivering lower sickness absence rates and, ultimately, healthier bottom lines.

"Physio Med was able to highlight that half of our Partners were receiving treatment whilst still working but at a significantly lower level of productivity. By introducing PAL and routing appropriate conditions that respond well to guided exercise through remote management, like lower back injuries, we have been able to help those Partners get better over a much shorter time period, reducing their pain faster, increasing their mobility and increasing their productivity by more than 20%. A great result for the individuals affected and the business as a whole."

WHY OCCUPATIONAL HEALTH PHYSIOTHERAPY

National Statistics

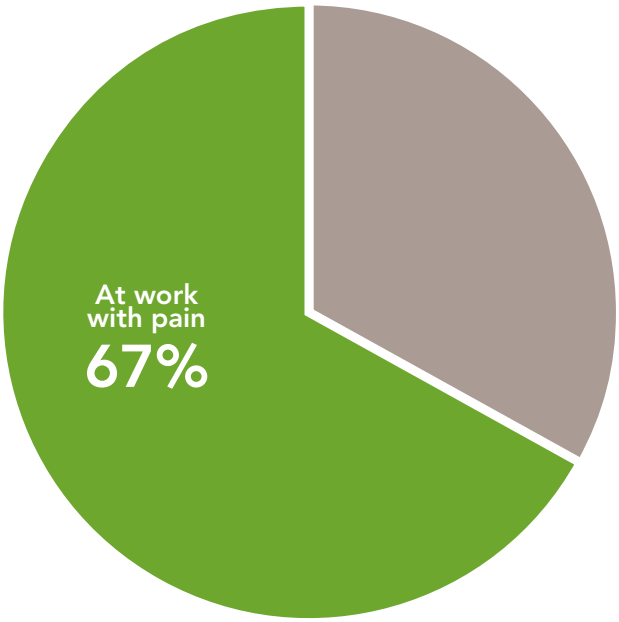
31 million days are lost to musculoskeletal absence each year.

In sickness absence this costs employers an average of £147 for every person they employ.

There are additional and hidden costs too. Which include; loss of productivity, paying for temporary cover, missed deadlines, and reduced customer service levels.

The 2009 Boorman Review recommended a strategy, which included early access to physiotherapy, to reduce sickness absence by a third, amounting to 3.4 million working days and an estimated direct annual cost saving of £555 million.

> **67%** of our referrals are patients that have a **chronic injury** and have been 'putting up with it' for months, even years.



> How many people do you employ that turn up to work each day but are unable to **work to their full potential?**

Client Statistics

With average access time for NHS physiotherapy via GP referral standing at more than 14 weeks, one of the key drivers for our clients was reducing the time employees were absent from work and improving the productivity of those at work but suffering pain.

Between March 2014 to March 2015, 3234 appropriate referrals were made to Physio Med, with initial assessment appointments taking place within an average of just 1.9 working days of the triage call.

62% of all referrals were managed remotely, with 28% being referred for face-to-face intervention after initial assessment and 10% being referred for face-to-face after the full ten day remote intervention.

58% of patients were discharged after ten days, as their condition was either resolved or they were able to effectively self-manage their condition.

At the point of referral 20% of employees were absent from work, with 25% at work on modified duties and 55% at work but suffering pain and therefore operating at reduced productivity levels, highlighting the hidden cost of presenteeism.

Of those employees off sick at the point of referral, 89% returned to work following treatment and overall 96% of all who used the service were safely maintained at or returned to work.

By ensuring patients were referred and treated quickly, those that used the service reported an average reduction in pain of 55% and improved productivity and function in real terms by 24% (59% to 83%) equating to 1.2 days pp/pw working a five day week.

Those referred for Face-to-Face treatment received an average of just over four physiotherapy sessions.

As part of the complete occupational health physiotherapy service offered by Physio Med a further 934 referrals were made for DSE, Work Station and Functional Capacity Assessments.

In financial terms the blended service model and fast access to treatment has bridged the gap in the NHS physiotherapy waiting list, helping our clients to reduce sickness absence and improve productivity - saving thousands of working days.

Based on the 3,234 patients who engaged with PAL over the 12 months, our clients estimate they saved at least 41,010 working days, delivering an estimated saving of more than £2,676,000 - which equates to an ROI figure of 5:1

UNDERSTANDING THE IMPACT

Nationally there is a real cause for concern in regards to MSK sickness absence. Millions of days are lost, productivity is not as high as it could be, and we have a nation of unfit, unhealthy and sick people.

How do these national figures stack up against the experience within your own business? Are you in a better or worse position? Wouldn't you like to predict the positive results you could gain, by operating with a fitter, healthier and more productive workforce?

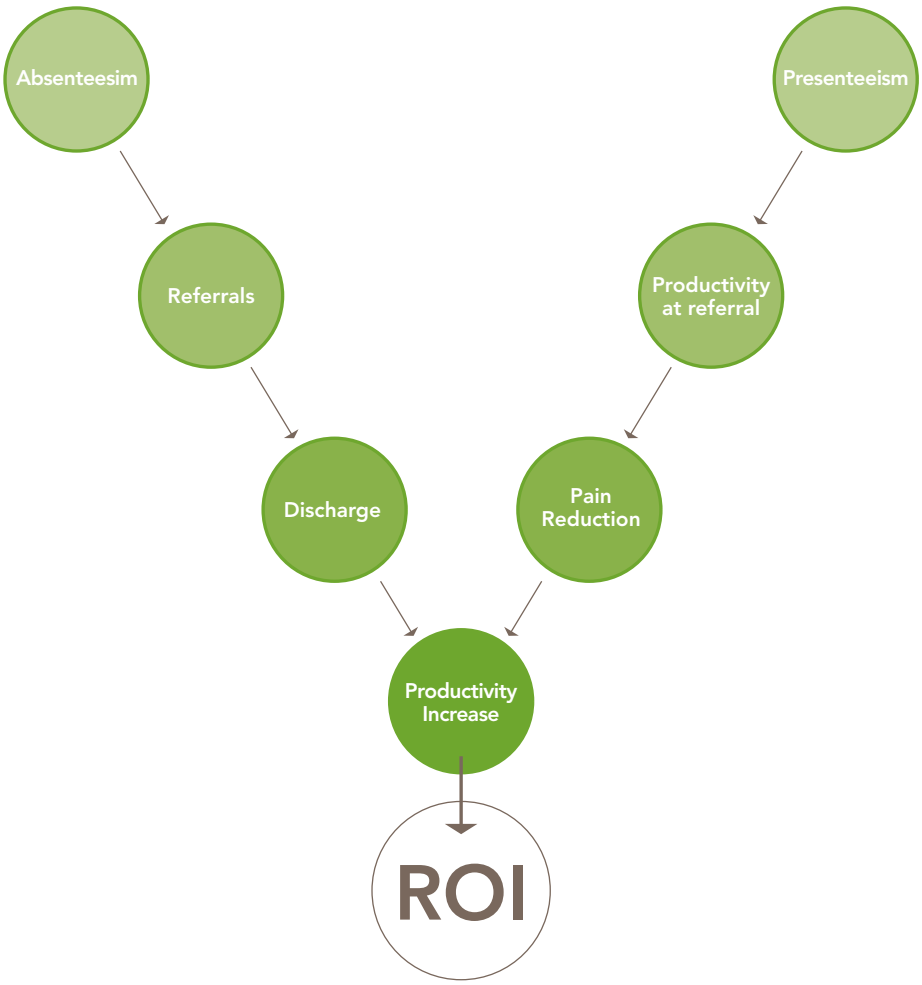
Benchmarking

We can benchmark your performance by using industry diagnostics and analysis via our network of clients and available national statistical data.

We take a snap-shot of your current performance and then provide a step-by-step proven approach to improving the health, wellbeing and performance of your employees.

Ability to predict

With this in-depth analysis it is possible to predict workforce improvements in productivity and for you to be able to work with a return on investment figure. Assuring that the activities you invest in, in order to improve the health and wellbeing of your team, are working and are being tracked for constant improvement.



THE PHYSIO MED APPROACH

Our proven approach provides reactionary physiotherapy support for those who need to treat a condition quickly and safely.

We provide support for those with musculoskeletal conditions to remain at work without pain and to be productive. And we provide proactive services to educate and provide support for workforces that want to have an improved healthy lifestyle, keeping people fit and well both inside and outside of work.

Getting people back to work

When we start working with our clients, our number one goal is to get people back to health, making them fitter and with improved wellbeing and productivity. Once we have established an efficient system of getting people back to work we can then move to the next stage, which is keeping people fit and healthy so they remain at work.

Keeping people in work

To help people remain fit and healthy we implement a system which reviews their job role, how they perform it and then we provide regular health checks in order to monitor their condition of health. Our goal here is to make sure that employees have the support they need to enable them to continue working healthily and productively.

Keeping people fit and well

Our ultimate aim is to minimise reactive services. At this level we educate the workforce on how to keep fit and healthy and how to self-manage existing conditions through face-to-face classes and providing healthy lifestyle and exercise materials.

THE MOST COMMON WORKPLACE MSK CONDITIONS

Introduction

It is useful to know what the most common workplace musculoskeletal (MSK) conditions are. In fact around 80% of all conditions, nationally, can be attributed to just five MSK complaints. Ranging from lower back problems, which equate to 38% of all complaints, right through to foot and ankle problems which make up around 4% of complaints.

The following sections of this book will provide you with background information on each condition, giving you more understanding, as well as providing you with treatment plans and exercises to enable you to work closer with your physiotherapy partner and improve the health, wellbeing and productivity of your workforce.

THE TOP FIVE MSK CONDITIONS, WHICH ACCOUNT FOR **80%** OF ALL CONDITIONS, ARE:

- Lower back **40%**
- Shoulder **14%**
- Knee **13%**
- Upper back / Neck **13%**
- Foot **5%**

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MANAGING MSK COMPLAINTS

NON-SPECIFIC LOWER BACK PAIN

NON-SPECIFIC LOWER BACK PAIN

Lower back pain is the main reason people access Physio Med services from our clients. Lower back pain accounts for **40%** of all referrals from our clients.

Of the lumbar spine patients seen:

Work aggravated: 46%
Domestic: 41%
Accidents at work: 12.5%

Lower back pain background

- Very few people who feel pain in their lower back have a serious medical problem
- 90% of people who experience lower back pain for the first time get better within two weeks
- People who have back pain for longer than two weeks should seek advice from PAL
- Very rarely do people with lower back pain develop chronic back problems

Key facts

- Back pain is common
- It usually only causes problems for a short period of time
- Normally correct advice and exercises can resolve the problem
- There are pro-active steps you can take to prevent problems

Symptoms

Most back pain is in the lumbar spine and normally affects one side more than the other.

In some cases the pain may be referred and will go into one leg.

Above is the most common pattern down the back of the leg in the sciatic nerve - what people often call sciatica

In rarer cases the pain affects the front of the leg and the groin/hip area. This is called femoral nerve pain (as seen below)

If the pain is in the leg, either front or back, seek medical advice immediately. Nerve pain can be very debilitating and should be addressed as quickly as possible!

General advice

Remember, if you try any of the things below and you feel they make you worse **NOT** better, contact us for individual advice!

Every back problem is different. There are many causes of lower back pain and some may have more than one cause or contributing factor. However most back problems (not all but most) respond well to four things:

1. **Keep Moving**

This works in over **95%** of cases.

Do NOT stay in bed all day or sit in a chair for long periods.

Try to change your posture every 20 minutes e.g. if you're sat for 20 mins, stand for one-two minutes before sitting again. If you walk for 20 minutes, stop and sit for a few minutes.

2. **Heat**

This works in over **90%** of cases.

Use a hot water bottle on the affected part of the back for 20 minutes at a time.

3. **Tablets**

If you can't do your daily activities due to the symptoms, take some tablets.

The use of the correct medication works to relieve symptoms in nearly every case.

Use pain killers and/or anti-inflammatories - ask your local pharmacist for advice.

If over the counter medication is ineffective, see your GP for stronger tablets.

4. **Exercises**

Exercises can be used to relieve muscular tension and correct the alignment of the spine.

Simple McKenzie exercises work in over **80%** of cases.

Core stability exercises can stabilise the spine, reducing symptoms and preventing recurrence.

Physiotherapy treatment

Mobilisations and manipulation

Some back problems require specific treatments which can be provided by a qualified physiotherapist. Physio Med can offer specific advice on these situations.

Factors that contribute to back pain

- **Poor posture**

Poor posture damages the structures within the back, causing pain and dysfunction.

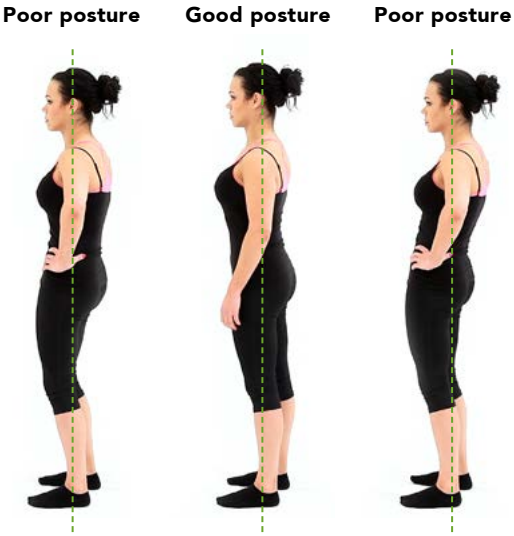
This occurs slowly over time and is often called insidious back pain as there is no specific cause.

So what is good posture?

Good posture is the term applied when the three spinal curves are maintained with low muscular effort.

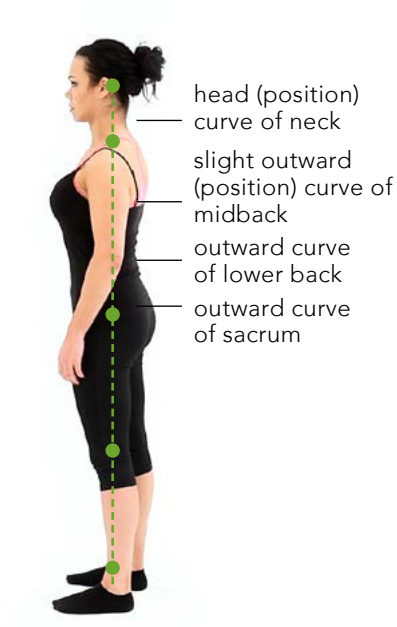
Remember postures are position related!

- **The Standing Posture** - avoid the two main types of poor posture - Sway Back and Flat Back



"The pain came on over time, I didn't lift anything."

- Maintain the three curves with equal weight distribution by keeping your ears, shoulders and hips in a straight line (view from the side).



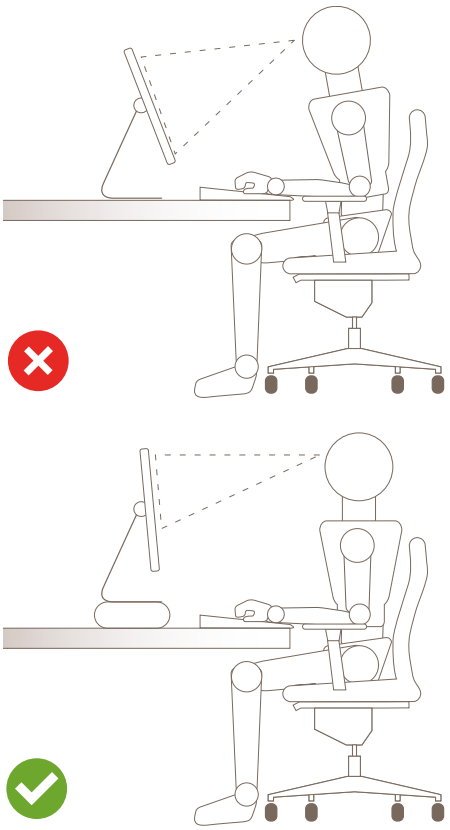
- If your task involves standing, try to make sure any work surfaces are at the right height for you. You might need to raise or lower the surface. The right height for you is the height at which you would be able to put your hand onto the surface whilst stood upright with a small (15 degree) bend at the elbow.
- Don't break our earlier rule!!! Alter your position regularly so that you don't stand still in one position for longer than 20 minutes.
- Don't stand for long periods in high heels or shoes with little cushioning or support.

- **The Seated Posture** – if you sit unsupported in one position for a few minutes, the lower back muscles fatigue, resulting in a slouched sitting position. This is not good!

In order to maintain good posture in sitting:

- Sit with both buttocks on the seat (ensure it is stable and firm).
- Take most of your weight equally through the tail bones of the pelvis.
- Rest your feet easily on the floor and support your low back arch with the chair back or, if that won't fit properly, use an additional cushion / rolled up towel.
- Your hips should be slightly higher or equal to your knee joint (90 degrees bend).

- If sat at a table or desk using a computer, the middle row of the keyboard should be level with your elbow and the top of the screen (not the screen casing!) level with eye height.

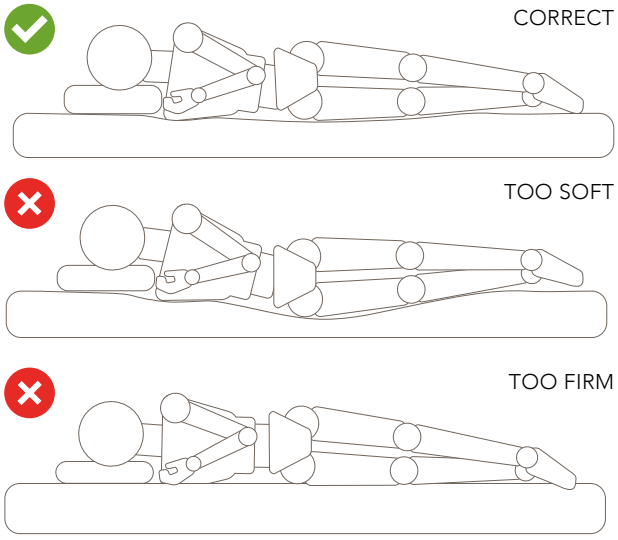


- If sat at a table or desk writing, the elbow should be just below the table top. A writing slope (or tilted surface) helps stop the body from needing to lean forwards, thus maintaining good posture.
- Office chairs can be easily altered to fit the individual, however home furniture is not so easy. To check if your sofa / armchair is right for you, you should be able to sit down into the correct position (back supported and feet on the floor) in one motion holding a cup of tea. Also you should be able to stand up again from that position in one motion still holding and not spilling the tea, without putting your hands down.

If your home furniture is:

- Too deep – pack the back with firm cushions
- Too soft – wrap a wooden board in foam and put it under the seat cushions
- Too low – raise it up using wooden blocks under the feet
- No back support – use a rolled up towel

- **The Sleeping Posture** - 40% of our lives are spent in bed, therefore both the bed and sleeping position are important to prevent back problems developing or re-occurring.
- Make an assessment of your bed – lay on your back, slide your hand (palm down) between your lower back curve (small of your back) and the mattress…



- Slide hand through fairly easily with no gap? Sounds OK!
- There is a gap? Probably too hard - lay a spare duvet down under your bottom sheet to soften
- Struggle to push hand in? Probably too soft – if the mattress is not sagging try putting a board under it to add stability. You may need to replace the mattress / bed if it is sagging

Make sure you have enough space, consider the height (getting on/off and making/changing it), the width and the length. A cramped night's sleep will not help reduce or prevent pain.

Sleeping positions and actions that can help:

- Side lying with pillow between knees
- Put a pillow under the knees when laying on your back
- Put a sleep roll (or rolled up towel) round your waist (especially if side lying)
- 'log roll' to turn over in bed (keep body in a straight line, cross ankles and bring arm across body to roll)
- Fidget when awake, don't try to lay still
- Do not 'heave' sit-up style into sitting from lying on your back. Instead, roll over onto your side, move your feet over the edge of the bed and use your arm to push you upwards (while your feet move down to the floor as a counter weight)

Lifting and Carrying

This is the most common cause of back problems that are not postural.

Most back problems we treat come from poor lifting or carrying at home!

Tips for lifting and carrying

- Avoid the activity in the first place. If that is not possible, reduce the load / task
- Get help
- Use equipment to help e.g. hoist or trolley
- Breakdown the load or distance to be carried

Assess and clear the route that the load will travel

- Ensure all doors are open and big enough
- Ensure there are no trip / slip hazards
- Ensure the new location is clear, large enough and at a safe height

Ensure that you are appropriately clothed

- Clothes should allow a full range of movement
- Shoes should be suitable for the task

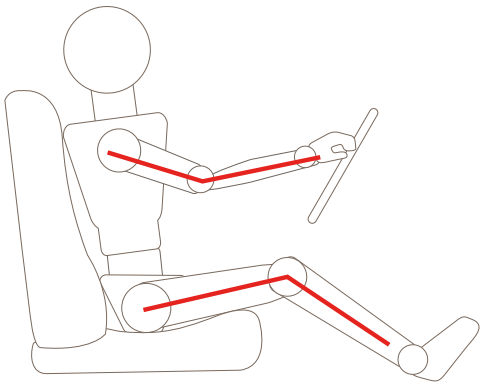
Use a safe lifting technique:

- Picture removed
- Assess the load – can you lift it safely? If not, ASK FOR HELP
- Get your feet around the load if possible - if not, place them at the 'ten to two' position
- Get as close to the load as possible - never lift at arm's length
- Get a good solid grip
- Bend from your knees (not your back)
- Keep your back straight
- Chin up and look where you are lifting to
- Keep the load as close as possible - hold it close to your pelvis
- DO NOT TWIST OR TURN

Driving

People who spend a large amount of their time driving are more likely to get back problems.

- Proper adjustment - Starting with the seat in an incorrect position makes it easier to get the correct position, so push the seat all the way back, place it as low to the floor as possible and recline the seat 40 - 45 degrees.



- Bring the seat height up until you can comfortably see the road and instruments and your hips are as high as your knees. If you are still too low, try adding a small cushion or folded towel under your tailbone
- Move the seat forward so you can reach and fully depress all the foot pedals with a comfortably bent knee.
- Bring the back forwards until you are reclined at a 100-110 degree angle (check the previous sitting posture information for more detail)
- Adjust your headrest so it rests in the middle of your head – it should not push your head forwards!
- Adjust the lumbar support so that you have even back support and can feel it supporting your lower back comfortably. Use a rolled up towel if your seat lacks sufficient support
- Bring the steering wheel down and towards you to minimize reach. You should be able to reach it with a slightly bent elbow and your back resting on the seat-back
- Now adjust the mirrors. If you start to slouch down or get into a bad position, the mirrors will feel like they need to be adjusted – this is your cue to correct your posture!

Holding the steering wheel

- Lower your hands from the 'ten to two' position to the 'quarter to three' position and feel your shoulder and neck muscles relax

Getting in and out

- Always remove your wallet from your back pocket before sitting (it causes the pelvis to twist which stresses the back)
- When getting in, sit first and then swing your legs into the car
- To get out, slide the legs out first and then stand up to decrease low back strain
- Give your body a few minutes out of the car before lifting things out of the boot - do a few back straightening movements first
- Take frequent breaks to get out and stretch - at least every two hours

Exercise in traffic jams

- Shrug shoulders, hold for five seconds, relax & repeat x five
- Pull shoulder blades back, hold for five seconds relax and repeat x five
- Tuck chin in, hold for five seconds, relax and repeat x five

Aiding Recovery with a Home Exercise Programme

DO NOT rest in bed until the pain resolves. This often makes the pain and/or problem worse.

Where possible, the best advice is to stay active and continue your daily activities as normal.

- Obviously if these activities are adding to the pain then do not continue them, but getting back to work and keeping the area moving is most often the best way to minimise the pain.
- Do regular gentle mobilising exercises. Examples are shown below. REMEMBER most people find one or two exercises they just cannot get along with! If you find that an exercise is making you worse, STOP! You most likely need assessment to get the best exercises for you!

Exercises come in different levels (often called 'intensities'). Generally, the harder the exercise is, the more intense it is said to be. Below, the exercises are separated into 'less difficult', or 'lower intensity', at the top and 'more difficult', or 'higher intensity', at the bottom.

- Start at the top and see which ones you can do.
- Stop if an exercise increases your pain.
- Do not do exercises that make you feel worse.
- Only work your way down the list as you feel you can. Remember, at some point the exercises will be too hard for you. Don't do the ones that are too hard.
- If you can't do any of the exercises, contact us for further guidance.

Early Exercises:

When you first get a back problem, or when that problem is particularly bad, exercises can help. However, getting on and off a bed - or worse still, the floor - can do more harm to your back symptoms than good! So it is always advisable to start with exercises in standing not lying. Obviously doing them this way limits your options (there are literally hundreds of floor exercises for the back), so these exercises are often done frequently to make up for the fact that they are not that hard.

Doorway exercises:

Extension - this is a variation of a floor exercise but done standing. Using a door frame, stabilise your shoulders by holding the door frame (you can have your arms lower if you can't get them as high as the picture) - this makes the exercise a pure back exercise, not a whole body one. Stand with feet hip width apart. Now GENTLY move your hips forwards to arch/extend your back. STOP just before any pain. This movement may be very small at first and you may not even be able to stand straight. Never mind - move your hips through the door frame. Some people find just trying to stand straight hard enough. Just do what you can! This exercise should be gentle and should NOT increase your symptoms. This exercise is NOT 'no pain no gain'.

Repeat ten times.

Do once each waking hour (do your best).

Side to side – again, a variation of a floor exercise. In a door frame, stabilise your shoulders (you can have your arms at any height). Feet hip width apart. GENTLY move your hips to one side and then the other. Be careful not to lean with your shoulders as you do this. STOP just before any pain. This movement will be better on one side than the other. Sometimes it is tempting to only go to the worse side - don't! You will make that your better side and limit the other side. Go to the edge of pain and come back to the middle. Do the exercise reciprocally (left then right and repeat). This exercise should be gentle and should NOT increase your symptoms. This exercise is NOT 'no pain no gain'.

Repeat ten times to each side every waking hour (or as you can).

Floor exercises (early level)

Extension - Lie on your stomach on the floor or a bed. Use your arms (not your back muscles) to raise your shoulders up, arching/extending your back. Be gentle here, you may only be able to move your shoulders slightly at first. That's OK. Don't push into pain, stop at the edge of it. Relax back down and repeat.

Repeat ten times

Do up to once an hour (be sensible - if increased frequency increases your pain, do less)

Knee rolling - Lie on your back and bend your knees (to gauge how far, bend one knee until your heel is opposite the other knee then bring the flat leg up to match). Place your feet and knees together. Now, under control, roll the knees to one side as far as you can without pain. Now return to the middle and repeat on the other side. One side will be easier than the other. Don't force the stiffer side - let it even out over time.

Repeat ten times to each side (do one side to the other)

Perform up to every hour (be guided by symptoms - more symptoms = too much)

Kneeling flexion/extension (cat/camel stretch) - Kneel on all fours. Keep your hands under your shoulders and your knees and feet hip width apart. Make sure your hips are at a right angle (not forward or back from your hips). Now arch your back as far as you can comfortably. Do not force the movement. Now go the opposite way and round your back. Again, don't force the movement. Relax to the middle point and repeat.

Repeat ten times (up and down)

Perform up to five times per day (best done as you wake and just before going to bed)

Back bracing (pelvic tilt) - The starting position is key in this exercise, as you are teaching your muscles to start working in the correct pattern again. Lay flat on your back on a solid surface. Bend your knees so your feet are now where your knees were (this is easiest to do by bending one leg so the heel of your foot is at knee level, then bring the other knee up to match it). Your hips, knees and feet need to be aligned with each other (known as 'making train tracks' with your legs). To do this, place your feet together then turn your toes outwards as far as you can whilst keeping your heels together. Now bring your heels to match your toes, which puts your feet hip width apart. Now line up your knees with your toes so your knees are now hip width apart. Now brace your back into the floor and hold (you can put a hand under the arch of your back to feel the contraction). Many people find activating their pelvic floor helps with the bracing (tighten your muscles as if you were stopping mid flow when using the toilet), although this isn't compulsory.

Hold for five-20 seconds (longer is harder. Remember to breathe naturally throughout)

Repeat up to 20 times (more repetitions is harder)

Repeat up to hourly (more times a day is harder)

Advanced exercises:

Bridging - Lay flat on your back (start on a solid surface but doing these on the bed can increase the difficulty). Bend your knees so your feet are now where your knees were (this is easiest to do by bending one leg so the heel of your foot is at knee level, then bring the other knee up to match it). Keep your feet hip width apart (to get this width, place your feet together then turn out your toes as far as you can whilst keeping your heels together. Now bring your heels to match your toes). Now line up your knees with your toes (often referred to as 'making train tracks' with your hips, knees and feet) so your knees are now hip width apart.

From this position, brace your back into the floor. Now lift your hips (keeping your legs in that straight line). Hold this position (the longer you hold, the harder the exercise). Hold for at least a second up to 20 seconds and remember to breathe naturally throughout. Now relax and repeat at least five times (more repetitions is harder). Be careful to gauge your level. Use more time held or more reps to progress this in a controlled manner.

Perform one-three times per day

Flexion - Flexion is an excellent exercise of the spine but is an advanced exercise that many people simply don't like. If you try this exercise and find it aggravates your problem, stop immediately. There are many alternatives to this exercise - seek professional advice for these.

Start by laying on your back on a hard surface. Raise one leg up by bending your hip and knee (to make this exercises easier at first, try leaving your foot on the floor and drag the foot along the floor, this supports the weight of the leg). If you can - raise the knee up and clutch it to your chest with your hands. Note, many people have to start this exercise by just bending the hip and knee as far as they can without even lifting the foot off the floor. It can take many sessions before you can even reach your knee to grab it, never mind pull it towards you. If you can reach your knee, pull it gently towards you.

Hold the position for one to 30 seconds (longer is harder)

Repeat five times

Repeat up to five times per day (best done as you wake and just before going to bed)

Flexion - Double flexion is a very advanced exercise and is a progression of the one below. Once you can hold each knee towards your chest for 30 seconds, you can progress to doing this exercise with both knees.

Be very gentle when pulling here

Hold for five-30 seconds

Repeat five times

Repeat up to five times per day (best done as you wake and just before going to bed)

Table top - this is an advanced version of back bracing (as seen above) and is an exercise with three levels.

Level one: Lay flat on your back on a solid surface. Bend both knees so your feet are now where your knees were (try bending one leg first so your heel matches the opposite knee, then bring the other leg up to match).

Now brace your back into the floor and hold (you can put a hand under the arch of your back to feel the contraction). Many people find activating their pelvic floor helps with the bracing (tighten your muscles as if you were stopping mid flow when using the toilet), although this isn't compulsory.

Once braced, raise the knee up until you have made a right angle with the hip and the knee (as seen below).

Hold for five-20 seconds (longer is harder and remember to breathe naturally throughout)

Repeat up to 20 times (more repetitions is harder)

Repeat one-three times per day (more times a day is harder)

Level two - This is a much more advanced version of this exercise and involves lifting both legs at the same time (keep your legs together). This can be far too much for the back in the early stages and should be used much later in your program. Lift both legs to the table top position and hold.

Level three - (pilates 100's) in level three of the exercise, the position above is held and the arms are held straight by your sides. Keeping the back braced, move the arms off the floor in a one-five inches (or three to 15cms) oscillating motion. This exercise is known as 'hundreds', as you are aiming for 100 oscillations. Start low - try 10-20 and work up! Lifting the head at the same time is an advancement of the exercise as it further tightens the back. Start with the head resting on the floor (do not lift the head if you have had any neck problems). Try to breathe normally throughout if possible (many people hold their breath to stabilise their back at first, breathing in for five and out for five, as is often advised, makes many people light headed).

Repeat one-three times per day

Swimming or Superman exercise - this exercise can be done laying on your stomach but can be progressed to four point kneeling.

Lying on stomach - lie on your stomach with your hands up above your head (you will need a large space to do this). Lift one arm and the opposite leg off the floor (just one-two inches or three-six cm is good at first). Don't lift too high at first or you will make it painful! Hold for five - 30 seconds (longer is harder). The higher you lift, the harder the exercise.

Repeat five -20 times (more is harder - remember to breathe naturally throughout)

Do one-three times per day (more is harder)

Kneeling (very advanced) - start by kneeling on all fours. Keep your hands under your shoulders and your knees and feet hip width apart. Make sure your hips are at a right angle (not forward or back from your hips). If you're not in a stable position you may fall over doing this exercise! Now lift one arm and the opposite leg off the floor. Straighten the arm and leg and lift them above body height if possible (this may be too hard in early attempts). Hold for five-20 seconds (longer is harder especially for balance) and remember to breathe naturally throughout.

Repeat five-20 times

Do one-three times per day

Plank - a popular stability exercise best done once you feel better to stabilise your back (or core as it is referred to). To do the plank, lie on your stomach and bring your arms under your shoulders. Push up onto your forearms so your elbows take the weight of your upper body (try to keep your arms straight down from your shoulders). Tighten your back muscles and raise your hips so your body makes a straight line (a plank). Try to breathe normally if possible.

Hold for five seconds upwards (some very strong people can hold this position for many minutes)

Repeat one-five times (dependent on hold time - longer hold = less repetitions)

Repeat up to once per day (normal is one-three times per week)

General advice:

- Generally keep changing your position every 20 minutes
- Try to walk short distances at least twice a day
- Take your pain medication
- Make sure work surfaces are at a comfortable height so you don't have to bend your back
- Replace a sagging mattress
- When performing tasks around the home, keep your back in mind and try to minimise straining or stretching it and pace yourself. For example, squat or kneel when cleaning the bath or reaching for low shelves and use an upright vacuum cleaner, keeping it close to your body. Divide up your tasks by room or activities and into bite-sized pieces. Rest in between each task
- If you have young children, bend your knees and don't twist to pick them up. Adjust the height of the cot so you don't need to bend, and try to avoid picking toddlers and older children up at all

You may need a consultation!

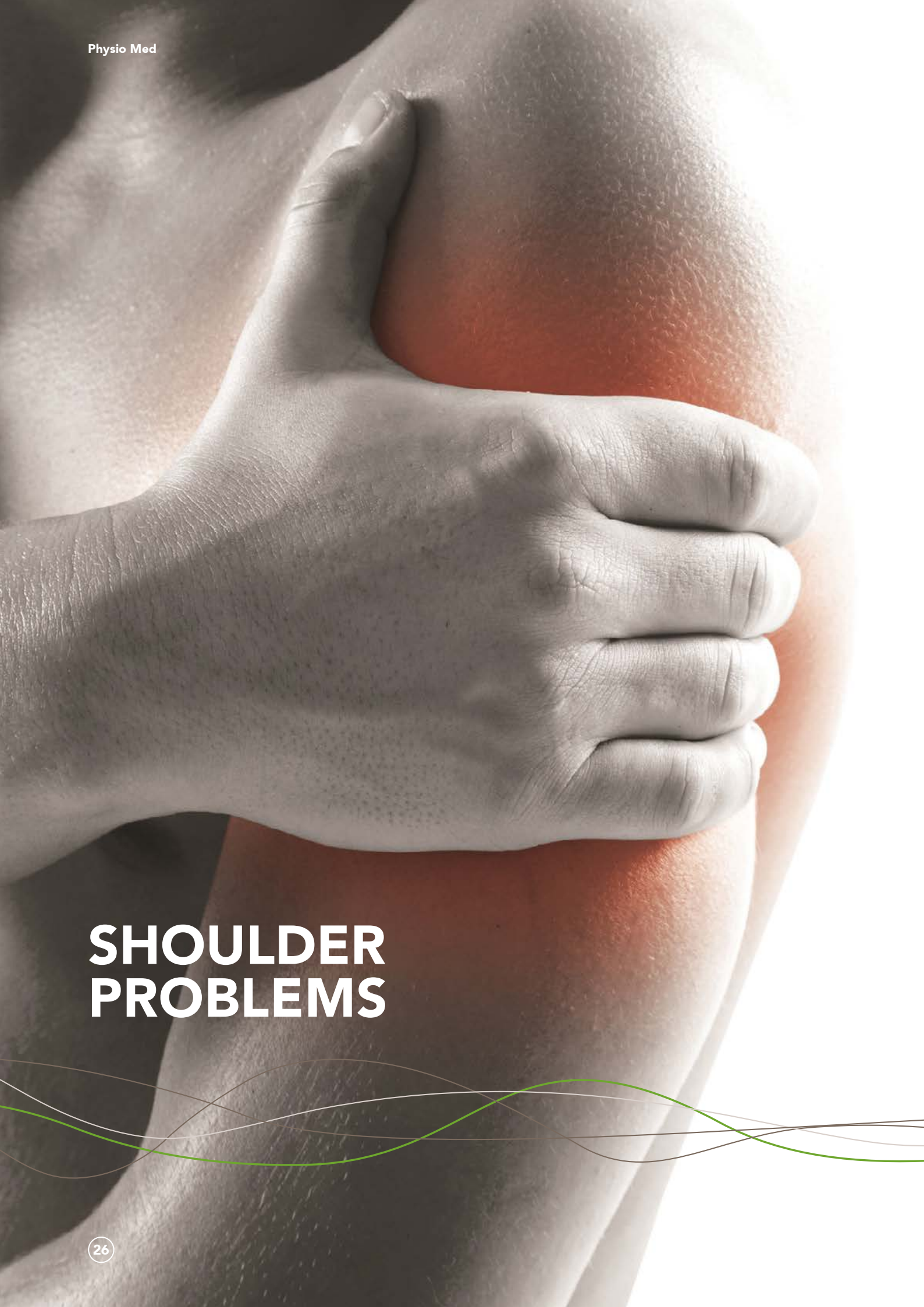
Back pain can be very complex and it can take an experienced clinician to get to a correct diagnosis. What helps one person's back pain can make another person's worse, even if the cause is the same! Clinicians have been trying to resolve back problems for generations and although we are now better at it, individual symptoms and reactions to treatments often still confound us!

There is no one size fits all treatment method!!!

When to seek immediate further advice:

- If the pain has persisted for more than two weeks
- The pain goes down into the leg
- If you have symptoms in both legs
- If you have bowel or bladder symptoms

Remember, if you try any of the things above and you feel they make you worse, not better contact us for individual advice!



SHOULDER PROBLEMS

SHOULDER PROBLEMS

Shoulder problems account for **14%** of the patients accessing Physio Med services from our clients.

Of the shoulder problem patients seen:

Work aggravated: 48%
Domestic: 37%
Accidents at work: 15%

Shoulder problems tend to fall into two main groups

- Stiff shoulders that lack movement and may be painful
- Painful shoulders that often have full movement even with the pain (often in these cases the pain is at particular angles, so one activity is painful, for example reaching for a cup from the cupboard, whilst picking a bag up from the floor is not)

Key facts

- Shoulder problems are very common
- They vary greatly in both type and the things that make them better
- What works for one person can make another worse
- Shoulder problems can become long term (chronic) if not managed correctly
- Normally, correct advice and exercises can help
- There are pro-active steps you can take to prevent problems

Pain (rotator cuff) Symptoms

Most shoulder pain is normally in the centre of the shoulder in the 'badge' area, but can occur in the front or back depending on the cause.

In some cases, the pain may be referred and will go into the arm but does not normally go below the elbow.

A lot of shoulder problems originate from the rotator cuff and have a pattern to the pain. The pain is normally experienced at what is known as a 'critical angle'. This is a particular shoulder angle where there is pain despite where the shoulder is (in other words it hurts at particular positions when stood, sat, lying down etc.) This is because a part of the rotator cuff complex is injured and when you put that part under pressure, it gives you pain. However, all the other positions are normally pain free. With these problems, the shoulder is painful to move but can still be moved if you can 'push through' the pain.

Rotator cuff problems can range from mild pain with simple tendon inflammation, through to more severe problems like bursitis (inflammation of a sac/s of fluid in the shoulder that stop the tendons rubbing on the bones), up to tears of the tendons and even, in rare cases, calcification of the tendons.

Key facts:

- Anyone can get rotator cuff problems
- Active people with active jobs/hobbies are more vulnerable
- Strong people get it as much as anyone else. Even power lifters get this problem - being strong does not save you!
- It can be acute (you hurt it doing something) or insidious (it just comes on for no reason)

There are said to be seven phases to recovering from a rotator cuff problem, but most people do not go through all of them. The majority of people skip at least one (if not more) as the problems in the rotator cuff are so variable:

1. Pain relief and anti-inflammatories

Pain Killers: Many people find they need pain relief and .your pharmacist can offer advice on this. Try not to fully mask the pain though, as you may well be doing more damage to the rotator cuff if you take the pain killers and continue to use it without restriction.

Anti-inflammatories: Several of the structures in the rotator cuff have such a low level of blood supply that anti-inflammatories just don't work. For the structures that do have a sufficient supply, anti-inflammatories work well but can slow the healing process in some structures and so should be used judiciously.

2. Restore range of motion

This phase is often not needed as rotator cuff problems are often painful, but do not actually restrict range of motion in the truest sense.

If your range of motion is affected, use the exercises below to restore it:

Pulleys are particularly effective and can be purchased for less than £5 online.

Using the pulleys:

Use your good arm to stretch your bad one up to the front for five minutes once a day. REMEMBER, this exercise should NOT be painful.

The pulleys can also be used out to the side for five minutes once a day. Keep in mind this should not be painful and will generally be more restricted than up to the front.

These exercises can be done using a wall instead of pulleys (but they are not as effective).

Front

Side

Creep your fingers up the wall as high as you can with your bad arm, then creep the fingers back down. Do this to the front first, then to the side (see above images). Repeat 15 times and do this five times a day.

Once your front and side movements are improved you will want to stretch the shoulder to rotation (this is more advanced).

A towel can help with this:

This is an advanced exercise and can be done both ways. That means the bad hand can be the top hand or the bottom hand (the bad hand at the top is the hardest normally). Use your good hand to pull up or down to stretch the shoulder into rotation. Repeat 15 times and do this five times a day.

3. Restore rotator cuff strength

There are two key movements to these exercises - rotating the arm inwards and rotating the arm outwards. Depending on your problem, you will often be told you only need to do one of these movements as the rotator cuff is split into muscles which do one action and muscles which do the opposite. In recent times, the advice has changed to encourage patients to perform the exercises both ways, as this prevents the over strengthening of one part of the rotator cuff and the creation of imbalance and posture related problems.

All strengthening exercises are normally started by simply pushing and pulling statically on a fixed object (most people use a door frame).

As can be seen in picture A, internal rotation is achieved by placing the hand/wrist onto a door frame and then simply rotating inwards from the shoulder against it. The opposite action is shown in picture B, where the forearm is placed on the frame and the arm is rotated outwards against the immovable object. The starting rotation of the shoulder can be adjusted to make sure the exercise is performed at the angle at which your problem is worst. Press up to the edge of pain, but not into it, and hold there for a count of five, relax and repeat five times. Do this five times per day (this exercise is not recommended in the first hour after waking).

Once the exercise can be done maximally without pain, you can progress to dynamic exercise.

Dynamic strengthening exercises: These exercises are shown with a resistance band (available in various resistances on line for less than £3) but can also be performed with a gym pulley machine.

Attach the band to something solid - many people tie them to door handles. Make sure your arm is at the side of your body and keep your elbow at a right angle. Now rotate inwards from the shoulder stretching the band. To warm up do each exercise for 15 reps. Do this twice using a low resistance band first. Then perform 8-14 repetitions, for 4 sets, with a 30 second rest between. Vary the resistance using different bands so it is difficult at about 12 reps. If you can get 15 it is too light. If you can't get 8 it is too heavy.

Repeat the same exercise going outwards instead of inwards.

REMEMBER, these exercises should not be painful. If they are, you are not ready for them. Go back to the earlier stage or seek advice from a physiotherapist.

4. Restore scapular control

This is a phase many people ignore but it can be key at the end of the rehabilitation to correct shoulder function.

Correct scapular positioning is difficult to master, and even harder to control, which is why it is often skipped as a step in the rehabilitation.

Shoulder blade position (scapula setting).

Your shoulder blade should be set to allow your shoulder joint to rest in the correct position. To do this:

Start relaxed (picture 1). Now shrug your shoulders towards your ears as high as you can without pain (picture 2). Now pull your shoulder blades back towards the middle (picture 3). From this flexed position, pull your shoulders back to a resting height (keeping them back) and you have set your shoulders. Hold this for five seconds, then repeat 10 times. Try to do this five times per day.

5. Restore position sense (proprioception)

Lie on your back, with your affected arm raised vertically from the body. Move the arm using small and quick movements in a mini-cross formation:

- Forward and backward
- Up and down

6. Restore neck/shoulder function

With some shoulder problems, the rotation of the neck can get out of sync with the movement of the shoulder. If you get shoulder and neck pain combined, you will need specialist advice from a physiotherapist to address this. If you have never had neck symptoms with your shoulder problem, you can skip this stage (as most people do).

7. Return to sporting activities

Once the above phases are complete, you can return to sporting activities. Remember to avoid heavy overhead lifting until your full strength returns, and do not do exercises that involve pulling or pushing from behind your neck, as these are not good for your rotator cuff.

Stiffness (frozen shoulder)

Key facts:

- The most common age range for this condition is 35-50 years old
- The problem can be primary, meaning that you spontaneously get a frozen shoulder but nothing else
- Or it may be secondary, meaning that you injure part of the shoulder and it becomes frozen as a result of this

True shoulder stiffening is often described in three phases, each of which requires different treatments and exercises:

- Freezing (or 'red phase') - The first phase when the shoulder initially becomes a problem. There is normally a period of pain and this can often be in relation to what is injured. For this reason, true shoulder stiffness is often confused with rotator cuff problems. This initial phase of pain is often followed by the loss of movement (described in the pattern below).

i. Outward rotation (lateral rotation) is normally most limited and manifests itself as an inability to put your arm in the sleeve of a jacket/shirt/coat

ii. Lifting your arm to the side (abduction). You can normally lift your arm higher in front of you (this can also be reduced in severe cases) than you can to the side of you

iii. Inward rotation (medial rotation). Normally this limits your ability to reach up your back (fastening a bra or reaching for a wallet in the back pocket).

Treatment in phase one

Pain relief can be key - speak to your pharmacist and try both pain killers and anti-inflammatories (the most common combination is paracetamol and ibuprofen). If they are not enough to relieve the pain, get some prescription medications from your GP. Always take tablets as prescribed or follow the advice on the label.

Ice - anything cold from the freezer (e.g. peas) that you can wrap around your shoulder should help with the pain. Don't put them straight on your skin though, as they might stick! Apply them through your clothes or wrap them in a light towel. Leave on for 20 minutes. Do not apply more than once an hour.

Gentle movements to maintain range of motion.

Pendulum exercises can help. Simply lean forwards and let your arm hang, then gently sway the arm like a pendulum forwards and backwards for two-five minutes, then repeat going side to side. Try to do this five times per day spread out as evenly as possible.

REMEMBER, if it hurts, you are doing the exercises for too long or going too hard or both. Be gentle in this phase!!!

Some people recommend a sling in this phase but remember, immobility might make the pain go down but it will also make the shoulder stiffer and potentially make the next phases longer.

Physiotherapy can help in this phase by giving correct advice and providing gentle mobilisations of the joint.

Some people may be offered, or require, a steroid injection in this phase. Your physio/GP can advise on this.

- Frozen (pink phase) - once the joint itself stiffens (often called adhesive capsulitis), there is minimal pain and the range of motion remains bad but constant.

Treatment Phase Two

Often pain relief is not needed in this phase but should be continued if you are still having painful symptoms.

Heat often helps in this phase. A hot water bottle or wheat bag placed through the clothing (or used in a cover) around the shoulder for 20 minutes can be used as often as required and is often very helpful just before exercises.

Mobility exercises: Exercises which stretch the shoulder are good in this phase.

Pulleys are particularly effective and can be purchased for less than £5 online.

Using the pulleys, go up to the front using your good arm to stretch your bad one for five minutes once a day. REMEMBER, this exercise should NOT be painful.

The pulleys can also be used out to the side for five minutes once a day. Keep in mind this should not be painful and will generally be more restricted than up to the front.

The exercises can be done using a wall instead of pulleys (but they are not as effective).

Front

Side

Creep your fingers up the wall as high as you can with your bad arm, then creep the fingers back down. Do this to the front first, then to the side (see images above). Repeat 15 times and do this five times a day.

Once your front and side movements are improved, you will want to stretch the shoulder to rotation (this is more advanced).

A towel can help with this:

This is an advanced exercise and can be done both ways. That means the bad hand can be the top hand or the bottom hand (the bad hand at the top is normally the hardest). Use your good hand to pull up or down to stretch the shoulder into rotation. Repeat 15 times and do this five times a day.

- Thawing (white phase) - Gradual return of motion, leaving some weakness in the underused muscles.

Continue to use heat as per the earlier phase.

Continue any range of motion exercises as per the earlier phase until full movement is achieved.

Add strengthening exercises: These exercises are shown with a resistance band (available in various resistances online for less than £3) but can be performed with a simple weight like a dumbbell, or in the gym on a pulley machine.

Do each exercise for 15 reps twice at a low resistance first to warm up the muscles. Then do eight-14 repetitions for four sets with a 30 second rest - vary the resistance so it is difficult at about 12 reps. If you can get to 15, it is too light. If you can't get to eight, it is too heavy!

Front

Side

Internal rotation

External rotation

REMEMBER, these exercises should not be painful. If they are, you are not ready for them. Go back to the earlier stage or seek advice from a physiotherapist.

Each phase can last up to eight months if not treated, which is why many GPs say frozen shoulders take up to two years to resolve.

General advice:

REMEMBER, if you try any of the things above and you feel they make you worse, NOT better, contact us for individual advice!

If you have had symptoms in phase one for more than two weeks, seek medical advice.

If you are in phase two or three, you would be best under the supervision of a physiotherapist.

Do NOT lift weights above head height.

Do not do exercises that involve pulling or pushing from behind your head.

Posture advice:

- **The Seated Posture** – for the shoulder, there are two key components to sitting correctly, these are correct desk height and scapula position.

- If sat at a table or desk using a computer, the middle row of the keyboard should be level with your elbow (elbow is bent between 90 and 120 degrees).

- If sat at a table or desk writing, the elbow should be just below the table top. A writing slope (or tilted surface) helps stop the body from needing to lean forwards, thus maintaining good posture.

- **Shoulder blade position** (scapula setting)

Your shoulder blade should be set to allow your shoulder joint to rest in the correct position. To do this:

Start relaxed (picture 1). Now shrug your shoulders towards your ears as high as you can without pain (picture 2). Now pull your shoulder blades back towards the middle (picture 3). From this flexed position, pull your shoulders back to a resting height (keeping them back) and you have set your shoulders.

- **The Sleeping Posture** – most people with shoulder problems report problems sleeping.

- Pillows and correct positions can help.

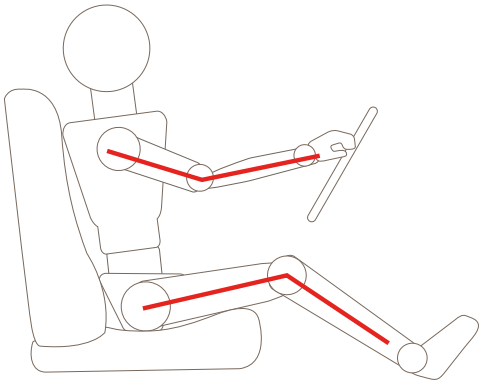
- If you lay mainly on your back, you can use a pillow to support your arm either by your side (pillow under arm) or out to the side (if your movement allows). Use a small pillow just large enough to support the weight of the arm. Many people need two pillows, one under the shoulder blade and one under the arm. Do not have your arm higher than at a right angle to your body and actually below 75 degrees if possible.

- If you lay mainly on your side and the bad arm is the lower arm, a pillow can help to take weight from it. Most people find this the worst position for sleeping. Try not to tuck your hand under your pillow or your head - this is usually a bad posture. Try to keep the arm at lower than a right angle to your body (the lower the better, but don't put your arm flat under your body as you will squash the shoulder). With the bad arm uppermost, use a pillow to rest the arm on. Don't just let it hang onto the bed as that can cause pain. You may need to roll up a pillow to achieve this.

Driving

Holding the steering wheel with shoulder pain can be a problem, as can changing gears (if that side is the affected one).

- **Proper adjustment**



- Bring the steering wheel down and towards you to minimize reach. You should be able to reach it with a slightly bent elbow and your back resting on the seat back

- **Holding the steering wheel**

- Lower your hands from the 'ten to two' position to the 'quarter to three' position and feel your shoulder and neck muscles relax

- **Exercise in traffic jams**

- Shrug shoulders, hold for five seconds, relax and repeat five times

- Pull shoulder blades back, hold for five seconds, relax and repeat five times

You may need a consultation!

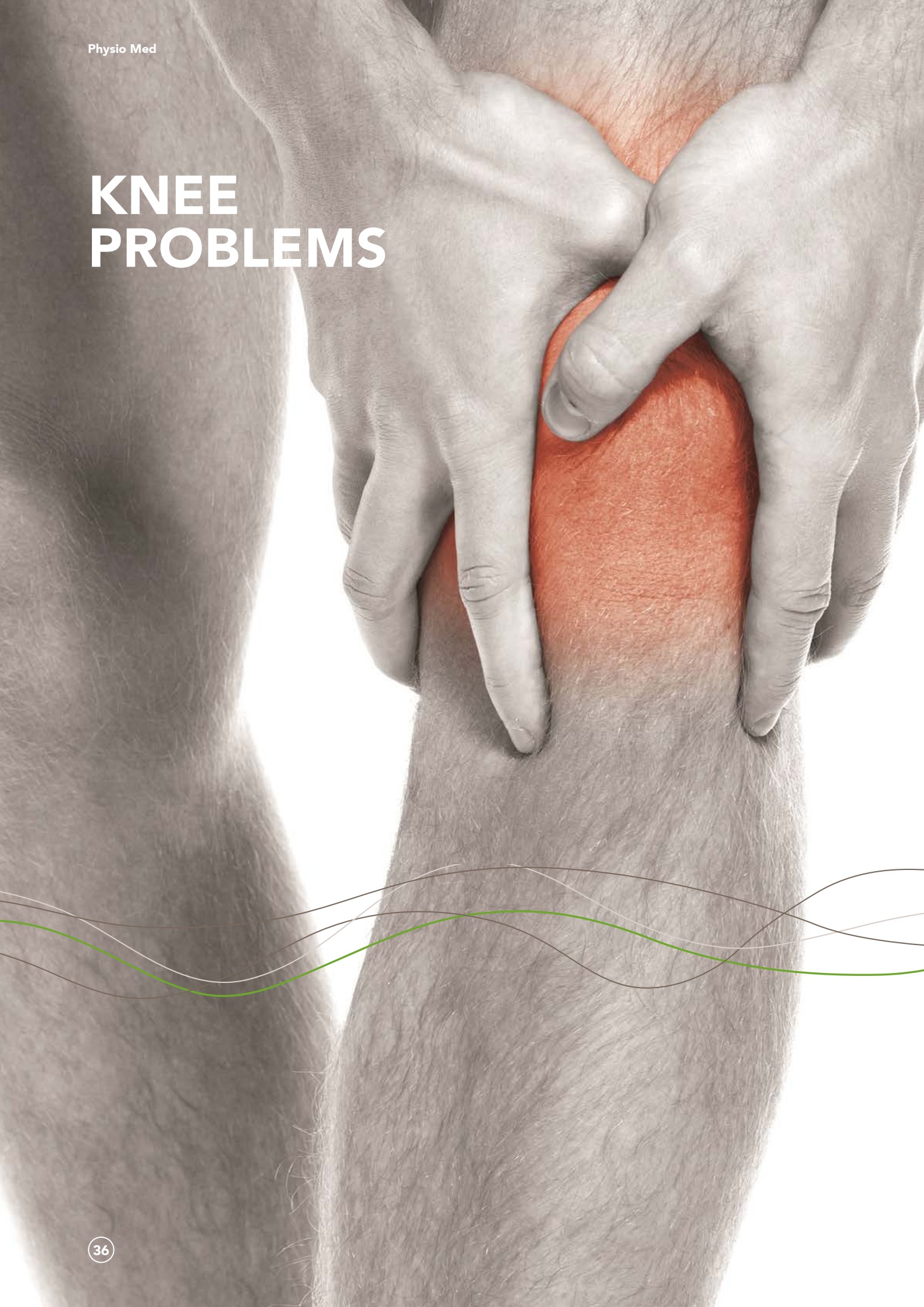
Shoulder problems can be very difficult and debilitating. Correct advice and treatment can make an enormous difference. If you have pain and/or stiffness, contact Physio Med for advice and consultation.

When to seek immediate further advice:

- If the pain has persisted for more than two weeks
- If the shoulder becomes stiff
- If you have symptoms going down the arm

Remember, if you try any of the things above and you feel they make you worse, not better, contact us for individual advice!

KNEE PROBLEMS



KNEE PROBLEMS

Knee problems account for 13% of the patients accessing Physio Med services from our clients.

Of the knee patients seen:

Domestic 63%
Work aggravated 26%
Accidents at work 10%

The knee is a very complicated area and many clinicians separate the front of the knee from the main joint. These problems are often called anterior knee pain (pain from the patello-femoral joint).

Key facts

- Knee problems are extremely common
- Many knee problems come from actual physical damage to mechanical structures which do not heal
- Treatment methods are often specific to a condition not a patient (what works for one person will not necessarily work for another)
- Knee problems can become long term (chronic) and can often only be managed, not cured
- Strengthening the muscles on the front of your leg will make almost all knee problems feel better (even if the problem is still there)
- There are pro-active steps you can take to prevent some knee problems
- Most knee problems react badly to kneeling or full knee bending

Trying to tell which problem you have can be difficult as no individual test, x-ray or scan will give a definitive answer. An experienced clinician (Physio or Consultant) who specialises in the knee will normally be able to give a diagnosis.

Knee symptoms that require immediate diagnosis:

1. Locking – if your knee locks and you are not able to bend or straighten it anymore, even if this symptom comes and goes, have your knee assessed.

2. Giving way – if your knee 'goes from under you' - get it assessed.

3. Swelling, redness and heat at the back of the knee giving pain down into the calf could be a sign of reduced circulation. Have your knee assessed by your GP as soon as possible.

Regardless of the diagnosis, several things help with knee problems.

Many people know of and understand the RICE principle - Rest, Ice, Compression, Elevation - to help with acute injuries. This principle works well in the knee and has been extended to the PRICE principle (Protection, Rest, Ice, Compression, Elevation) more recently.

Protection:

Protecting the injured area from further injury is key. If your knee was hurt during an activity, for example running, you will need to stop running to protect it. In this phase the use of a support is often recommended, however, supports are not necessary in every case and can have negative effects if worn over long periods of time.

Relative rest:

Protecting the knee is a good thing but, by the same token, some movement can help to limit stiffness. Do not just sit in a chair or go to bed for long periods. This balance of rest and use is referred to as 'relative rest' and is very individual. What one person can do could be too much for another. Common sense should prevail here. If an activity is painful and can be avoided, then it is best to be avoided. However, some pain may occur in normal activities such as walking down/upstairs. Obviously this can't be avoided, so try to limit it to reduce exposure to the aggravating factor. This ability to be able to use the knee (sometimes called exercise tolerance) alters as the knee problem changes over time. These changes can be reduced tolerance if the knee gets worse or improved tolerance if the knee gets better. This leaves us with a constantly changing amount of activity you can do in any one day/week/month and almost everyone does either too much or too little at some point! Remember you are looking for the right amount of activity overall to allow the knee to become pain free in the end.

Ice:

This can help with pain relief, controlling swelling (if there is any), and limiting the amount of heat in the knee (if the knee is hot) by moderating the inflammatory process. Anything from the freezer can be used to apply ice to your knee. Frozen peas are the most popular as they mould to the area well, but ice cubes in a towel or an ice pack can also be used. DO NOT apply any ice directly to your skin (because ice can stick to skin). Apply the ice through your clothes or use a towel wrapped around the ice instead. Ice should be applied to the knee for approximately 15-20 minutes not more than once in any hour. Apply as many times as possible until the symptoms of pain/swelling/heat go away.

Compression:

If the knee is swollen then compression will reduce this very effectively. The most common way to apply compression is to use an elasticated tubular bandage called tubi-grip. This can be purchased from any pharmacy for less than £5 and is sized compared to the size of your knee (if you have a lot of swelling, the bandage may need to be big at first and then different sizes may be needed as the swelling subsides). Put the bandage from your ankle up to mid thigh level and leave on during the day (you may need two to allow one to be washed). DO NOT wear any compression on your knee at night in bed.

Elevation: Lifting your leg up can help to drain the swelling and reduce the inflammation. Ideally the knee would be raised above the level of the heart but this is not always practical. Just putting the leg up on the sofa works (or at work lift the leg and rest your foot on a bin). Try to elevate the leg for up to 20 minutes (in the early stages you may only be able to tolerate five mins due to increased pain) then put the leg back down for at least 20 mins to allow circulation to return to normal. Repeat as often as you can. Elevation in bed during sleep is NOT recommended as it can affect your circulation.

Controlling the pain:

Pain relief and anti-inflammatories

Pain Killers: Many people find they need pain relief just to walk around and your pharmacist can offer advice on this. Try not to fully mask the pain though as you may well be doing more damage to the area. DO NOT use pain relief to allow yourself to play sports or perform hobbies like distance walking, this is not good for the knee.

Anti-inflammatories: Some knee problems don't involve a lot of inflammation and so anti-inflammatories just don't work. However, many of the problems respond very well to anti-inflammatories but remember, long term use can slow the healing process in some structures and so should be used judiciously.

Strengthen your thigh muscles (quadriceps):

Most people agree that, for the majority of knee problems, strengthening the muscles on the front of the thigh will reduce the symptoms even if it does not resolve the actual problem.

The muscles we are interested in strengthening are the quadriceps (quads) muscles. Normally exercises for these muscles are referred to as quads exercises.

There are many exercises which are excellent for the quads but are not particularly good for knee problems (particularly in the early stages). These exercises should be avoided initially and should only be returned to once the knee is recovered (or largely recovered), unless you are under the care of a physiotherapist who might choose these exercises specifically for you and your problem.

Exercises to initially avoid:

- Squats (squats below parallel are very hard on the knees)
- Lunges (of any type)
- Running
- Distance walking (more than 20 mins)
- Breast Stroke swimming
- Impact loading activities (skipping, hopping, jumping, trampoline etc)

Activities to initially avoid:

- Kneeling
- Bending to the floor
- Long driving (split it into segments by getting out and 'stretching your legs')

Quads exercises:

As with all exercises, some are harder than others and some suit some people and not others. The general rules for exercise are:

- Start with the easiest exercises and work your way up
- If an exercise hurts, **stop**
- If you can do an exercise easily, move up a level
- Can't get the exercises to work for you? See a physiotherapist for specific advice.

Early level (the easiest ones)

Normally these three early exercises are done together.

Static Quads: Probably the easiest exercise to do for the quads. Simply sit with a straight knee (or as straight as you can) and brace the knee down into the floor/ bed/sofa. Hold for a count of at least five (this can be made harder by holding longer) relax and repeat at least five times (the more reps you do the harder the exercise). Repeat this three to five times per day (again, more times per day is harder). This exercise is very popular and is used even after knee replacement surgery, so is normally a good start.

Single leg raise:

This is a progression of the static quad exercise. Start by bracing the knee as per the static quad then raise the whole leg off the floor/bed/sofa. Hold for a count of at least five (this can be made harder by holding longer) relax and repeat at least five times (the more reps you do, the harder the exercise). Repeat this three to five times per day (again, more times per day is harder).

Inner range quads:

Slightly harder than static quads but still a good starter exercise. Use a towel under the knee and lift the foot up off the supporting surface. Hold for a count of at least five (this can be made harder by holding longer) relax and repeat at least five times (the more reps you do, the harder the exercise). Repeat this three to five times per day (again, more times per day is harder).

Moving from one level to the next is a judgment call. Normally people progress by taking out the easiest exercise (static quad) and replacing it with the first exercise of the next level (knee extension). Remember to do the easiest exercises first then the mid-level ones. Over time you will move from all of the easy exercises to the mid ones.

Mid-level:

Knee extension (no resistance) – normally done sat on a chair but can be done sat on the edge of a bed. Raise the foot until the knee is straight. Hold for a count of at least five (this can be made harder by holding longer) relax and repeat at least five times (the more reps you do the harder the exercise). Repeat this three to five times per day (again, more times per day is harder).

Knee bend (mini or partial squat)

Use something stable to hold on to for support (normally a chair will suffice). Bend the knees until your toes disappear under your knee (keep your back straight as you do this). Then extend your knees to straighten back up. Do at least five times (the more reps you do the harder the exercise). Repeat this three to five times per day (again, more times per day is harder). Note there is no hold on this exercise.

Quarter wall holds – stand with your back flat against a wall. Bend your knees to approx. 45 degrees (more bend makes the exercise harder and less bend makes the exercise easier). Hold this position for as long as you feel able without pain. This exercise is normally only performed once per exercise session in a day. Dependent on the time held, this exercise may only be possible once per day in total. This should be done after any other exercises performed.

Advanced exercises:

Single knee bend – Stand on the bad leg and bend the knee until the toes disappear under your knee (keep your back straight). Stand back up, extending your knee (it is important that your knee stays over your toes and does not 'drift' inwards or outwards). Do at least five times (the more reps you do the harder the exercise). Repeat this three to five times per day (again more times per day is harder). Note there is no hold on this exercise.

Knee extension with resistance – as per the previous exercise but using either a sandbag on the ankle or a piece of exercise band to provide more resistance. The band can be purchased online for less than £3 and comes in varying resistances. In a sitting position, ideally on a chair, raise the foot until the knee is straight. Hold for a count of at least five (this can be made harder by holding longer) relax and repeat at least five times (the more reps you do the harder the exercise). Repeat this three to five times per day (again more times per day is harder).

Parallel wall holds – as per quarter holds but with more knee bend. Stand with your back flat against a wall. Bend your knees to approx. 90 degrees (never go lower than parallel on this exercise). Hold this position for as long as you feel able without pain. This exercise is normally only performed once per exercise session in a day. Dependent on the time held, this exercise may only be possible once per day in total (some people can hold this position for over five minutes). This should be done after any other exercises performed.

REMEMBER if you try any of the things above and you feel they make you worse NOT better contact us for individual advice!!!

General Advice:

Stairs:

Walk up stairs leading with your unaffected (pain free) leg, walk downstairs leading with your affected (painful) leg. This can be remembered easily by the saying 'the good leg goes up to heaven, the bad leg goes down to hell'.

Limit stair use. If this is not possible within a work environment, make use of escalators or lifts where possible and reduce time at work as needed.

Squatting/knee bending:

Try to raise any working surfaces to waist height. Try not to work from items on the floor. The old saying 'bend from your knees and not your back' is great if you have a back problem but terrible if you have a knee problem.

Sitting:

Use of low chairs/stools should be avoided - bend the knee less, not more.

Don't use chairs where the chair base touches the back of your knee. This can slow circulation and aggravate the sensitive structures at the back of the knee.

Ensure that your workstation is not cluttered and that you can stretch out your legs while you sit.

Kneeling:

Kneeling should be avoided as much as possible, however, in the real world some jobs/activities require some degree of kneeling. If you have to kneel, use kneeling pads and alternate the kneeling position and leg (put the bad leg up and don't kneel on it).

Cycling

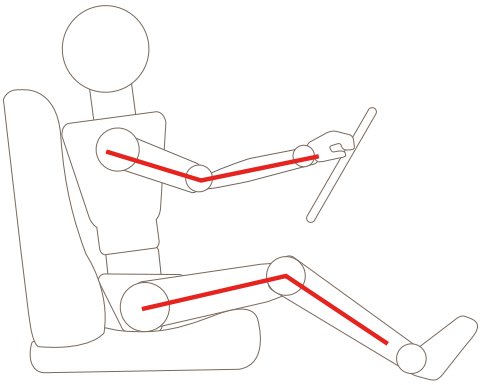
Ensure your saddle is at the correct height.

You should have a five to ten degree bend in your knee when the ball of the foot is placed on the pedal and the pedal is positioned in its closest position to the ground.

Cycle with the ball of the foot on the pedal – not the instep / arch of the foot!

Driving

Many people with knee problems have what could be described as a 'critical angle'. This is an amount of knee bend where the pain is worst. You might find this position is the one you sit with in your car. Or it may be the angle you go through when you press a pedal, for instance the brake.



If you can, adjust your car seat so you are not at this angle or going through this angle, (sometimes this is not practical). If you can't avoid the angle do your best to minimise its use with correct seat positioning.

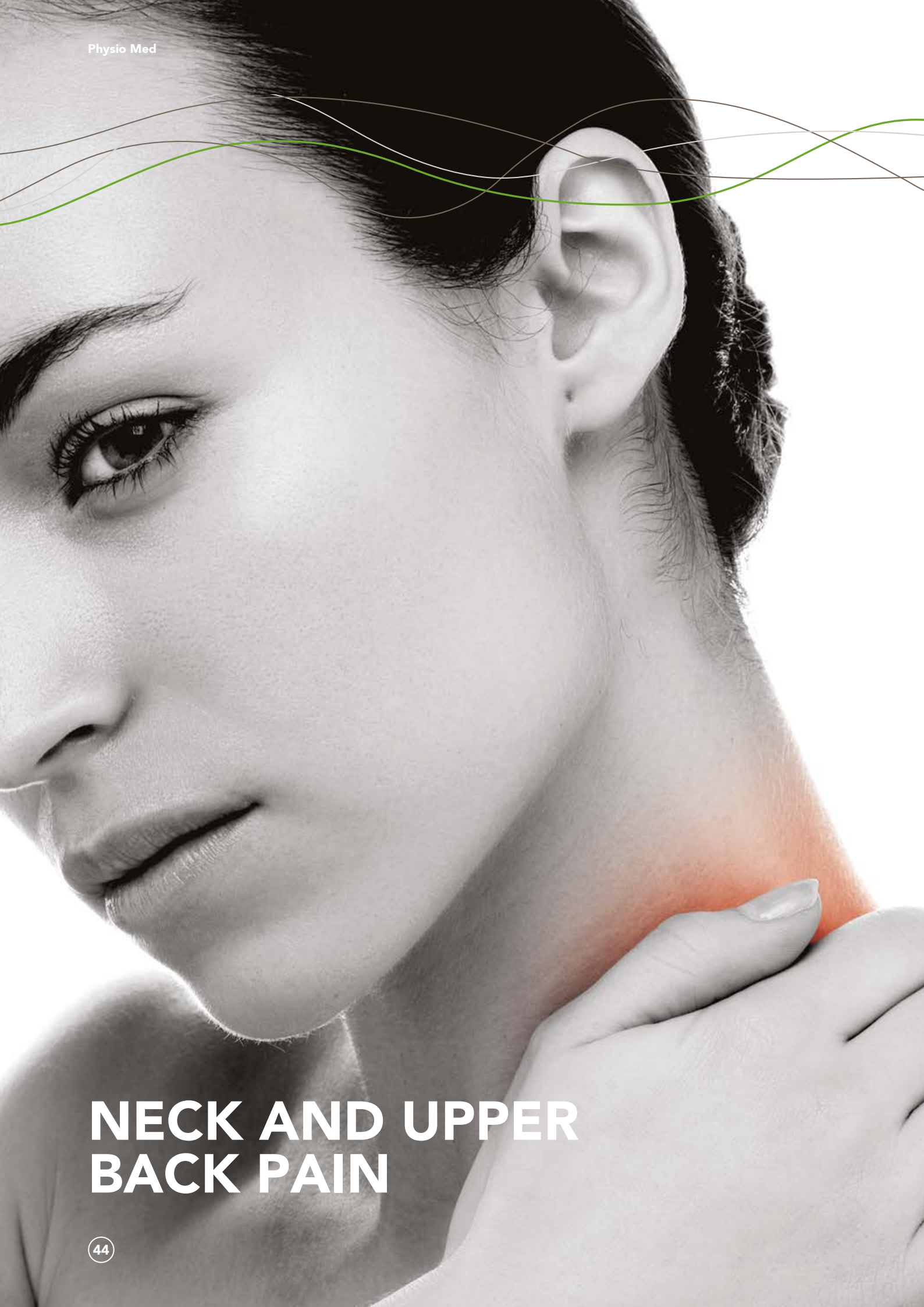
You may need a consultation!

Knee problems can be very difficult and debilitating. Correct advice and treatment can make an enormous difference. If you have persistent pain contact Physio Med for advice and consultation.

When to seek immediate further advice:

- If the pain has persisted for more than two weeks
- The knee gives way
- The knee locks
- Pain/redness/swelling at the back of the knee into the calf

Remember if you try any of the things above and you feel they make you worse, not better, contact us for individual advice!



NECK AND UPPER BACK PAIN

NECK AND UPPER BACK PAIN

Neck pain is the second most common reason people access Physio Med services from our clients. Neck pain accounts for 13% of all referrals our clients.

Of the cervical spine patients seen:

Work aggravated 53%
Domestic 38%
Accidents at work 8%

Cervical pain background

- Very few people who feel pain in their neck and upper back have a serious medical problem
- The majority of people with neck pain recover within a few days to a week
- Neck problems often give symptoms of headaches (even migraine type symptoms)
- People who have neck pain for longer than two weeks should seek advice from PAL
- Very rarely do people with neck pain develop chronic problems

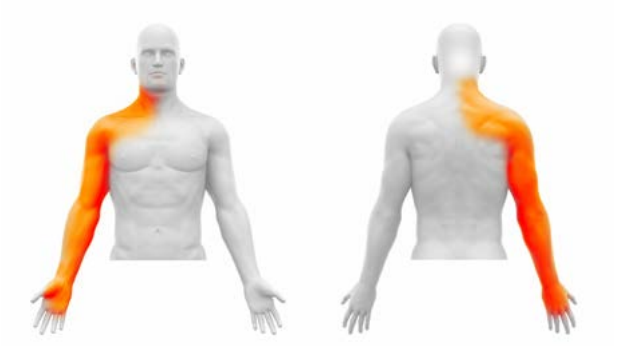
Key facts

- Neck pain is common
- There is often no known mechanism of injury (it just appears)
- Poor posture can create neck problems
- It usually only causes problems for a short period of time
- Under normal circumstances, correct advice, posture and exercises can resolve the problem
- There are pro-active steps you can take to prevent problems

Symptoms

Most neck pain is normally in the centre of the cervical spine and normally radiates to one side.

In some cases the pain may be referred and will go into the arm and can go as far as the hand.



There are three nerves in the arm so the pattern of pain can be different person to person.

In many cases the pain goes into the head and creates headaches and can even give migraine type symptoms.

If the pain is in the arm not just the neck and shoulder seek medical advice immediately. Nerve pain can be very debilitating and should be addressed as quickly as possible.

General advice

REMEMBER if you try any of the things below and you feel they make you worse, NOT better, contact us for individual advice!!!

Although every neck problem is different, and there are many causes of neck pain, the most common cause is bad posture. Even sleeping with poor neck posture can create neck pain.

There are instances where trauma creates neck pain, for example after a car accident where the neck is forced backwards then forwards at speed. This is commonly called whiplash. These types of acceleration/deceleration injuries can occur in sports as well.

Most neck problems (not all but most) respond well to four things:

1. **Keep Moving**

This works in nearly all cases.

Do NOT stay in bed all day or sit in a chair for long periods.

Neck collars should only be used in extreme circumstances and always under the supervision of a Physio or Doctor.

Try to change your posture every 20 minutes e.g. if you are sat for 20 mins stand for one to two mins before sitting again. If you walk for 20 mins, stop and sit for a few minutes.

2. **Heat**

This works in most cases.

Wheat packs are best for this as they can be wrapped around the neck for 20 minutes at a time.

3. **Medication**

If you can't do your daily activities due to the symptoms, take some tablets.

The use of the correct medication works to relieve symptoms in nearly every case.

Use pain killers and/or anti-inflammatories - ask your local pharmacist for advice.

If over the counter medication is ineffective see your GP for stronger tablets.

4. **Exercises**

Exercises can be used to relieve muscular tension and correct alignment of the spine.

Simple posture and mobility exercises work for most people even as early as 24hrs after onset.

Physiotherapy Treatment

Mobilisations

Some neck problems require specific treatments which can be provided by a qualified physiotherapist. Physio Med can offer specific advice on these situations.

Factors that contribute to neck pain

- **Poor posture**

Poor posture accounts for most neck problems because it stresses the structures within the neck which are not naturally large and robust.

Most structures in the neck are only designed to take the weight of the head, offering support and movement. They are not designed, like the larger lower back structures, for lifting etc.

This makes them more vulnerable to overuse injuries from poor posture.

So what is good posture?

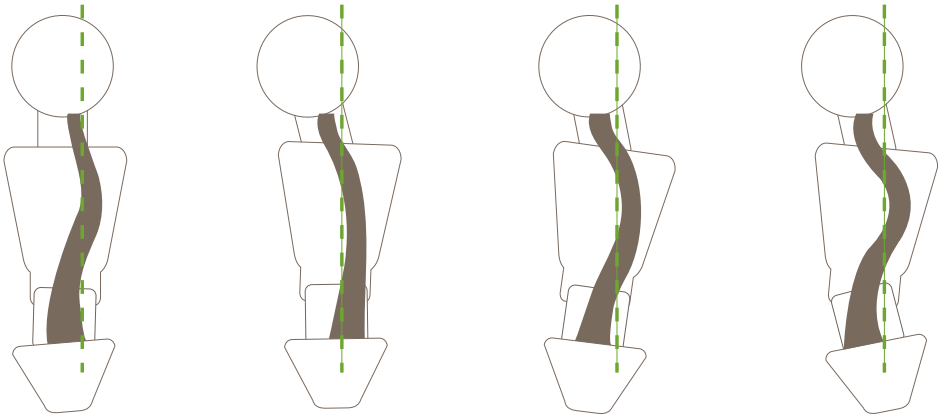
Good neck posture is when the neck holds the head in a neutral position.

The most common bad posture is head forward (or protracted) posture.

Remember postures are position related!

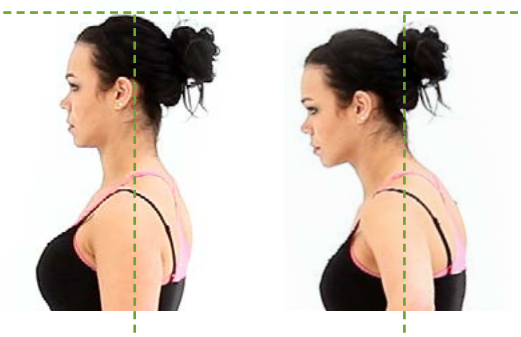
- **The Standing Posture** – as can be seen in the three bad posture types below, each one has a head forward posture

Upper Body in 4 Main Types of Standing Posture



Balanced Posture **Flat Back** **Swayback** **Kypho-Lordotic**

- Maintaining head neutral posture usually involves making sure your ear lobe is behind your collar bone when viewed from the side. This can be easier said than done! The first picture is correct the second picture is relaxed!!!!

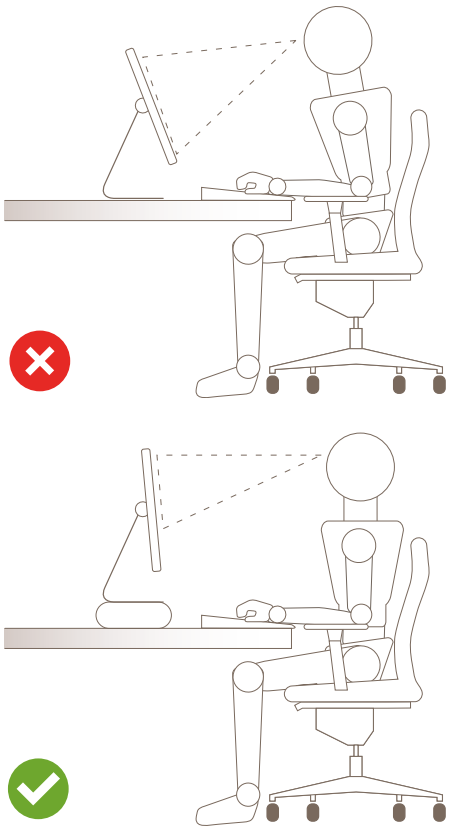


- Sometimes the neck posture can be affected by the rib cage position or even lower back posture. If this is the case speak to a physiotherapist who can help you correct this.

- If your task involves standing try to make sure you don't constantly look down. Look up periodically to reset your neck position.

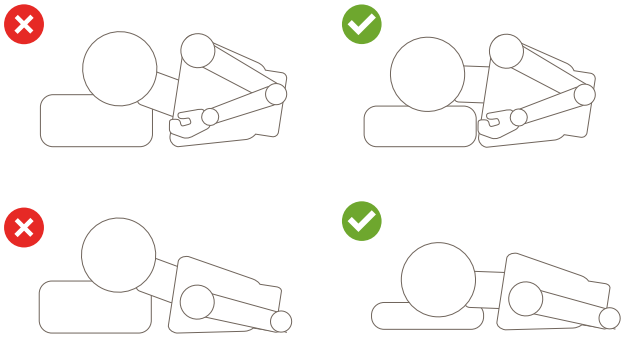
Don't break our earlier rule!!! Alter your position regularly so that you don't stand still in one position for longer than 20 minutes.

The Seated Posture – for the neck the two key components to sitting correctly are desk height and monitor height



If sat at a table or desk using a computer the middle row of the keyboard should be level with your elbow

- The top of the screen (not the screen casing!) level with eye height
- If sat at a table or desk writing the elbow should be just below the table top. A writing, slope (or tilted surface) helps stop the body from needing to lean forwards, thus maintaining good posture
- **The Sleeping Posture** – over half of reported neck problems were created by or are worse during or after being in bed. We spend a lot of time in bed (40% of our lives) and therefore the bed and, more importantly pillow are important to prevent neck problems developing or re-occurring.
- Make an assessment of your pillow or pillows
- If you lay on mainly on your back, your pillow should be just high enough to support your head whilst keeping your chin in the neutral position (see illustration). A thin single pillow is often enough to achieve this. Your chin should not be tucked and your head should not be tilted back.
- If you lay mainly on your side, your pillow/s should be high enough to make up to gap between the point of your shoulder and head (as seen below) This will often require a full size pillow or maybe even two pillows.

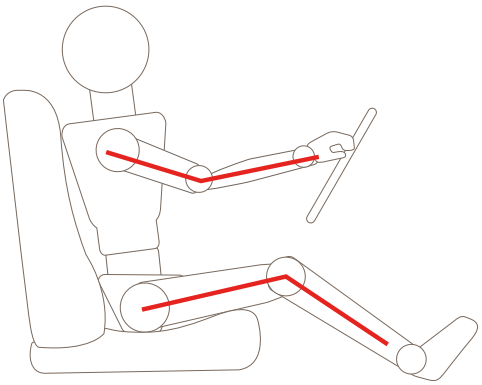


Driving

Although many cases of neck pain are from whiplash most people who get neck pain from the car get it from poor posture in the car.

Proper adjustment

- Bring the seat height up until you can comfortably



see the road and instruments and your hips are as high as your knees. This stops you from looking up or down when driving.

- Bring the back forwards until you are reclined at a 100-110 degree angle. This sets your spine in a neutral position
- Bring your chin back to neutral alignment (ear lobe behind collar bone as seen earlier)
- Adjust your headrest so it rests in the middle of your head – it should not push your head forwards!

- Bring the steering wheel down and towards you to minimize reach. You should be able to reach it with a slightly bent elbow and your back resting on the seat back
- Now adjust the mirrors – using your mirrors correctly prevents unwanted neck rotation which can exacerbate symptoms.

Holding the steering wheel

- Lower your hands from the ten to two position to the quarter to three position and feel your shoulder and neck muscles relax

Exercise in traffic jams

- Shrug shoulders, hold for five seconds, relax and repeat five times. Pull shoulder blades back, hold for five seconds relax and repeat five times
- Tuck chin in, hold for five seconds, relax and repeat five times

Aiding Recovery with a Home Exercise Programme

DO NOT rest in bed until the pain resolves. This often makes the pain and/or problem worse.

Where possible, the best advice is to stay active and continue your daily activities as normal.

Obviously if these activities are adding to the pain then do not continue them, but getting back to work and keeping the area moving is most often the best way to minimise the pain.

- Do regular gentle posture correction exercises. Examples are shown below. REMEMBER most people find one or two exercises that don't suit them. If you find an exercise is making you worse STOP! Ideally you need an assessment to get the best exercises for you.

Most people with neck problems do not need 'heavy' or 'vigorous' neck exercises to improve. Remember your neck only needs to support your head, unless you take part in a sport like boxing or a sport/activity involving a helmet.

- Start at the top and see which ones you can do
- Stop if an exercise increases your pain
- Do not do exercises that make you feel worse
- Only work your way down the list as you are ready. Remember at some point the exercises will be too hard for you, don't do the ones that are too hard.
- If you can't do any of the exercises contact us for further guidance.

Neck retraction - the most popular neck exercise because it helps with most neck postural problems.

It is very important when you have neck pain to do this exercise VERY GENTLY at first. DO NOT just pull your chin all the way back - it will hurt! Start gently and work your way back!

This exercise can be done standing and sitting. Start by looking straight ahead (focussing on a point in front of you can help) do not look up or down or left or right during this exercise. Now pull your chin backwards in a STRAIGHT line. Do this gently at first. Relax and repeat (you do not need to hold this exercise). If done right the exercise gives a double chin and a funny voice (if you try to talk). Many people find gently holding their tongue between their teeth helps during this exercise as it tricks the muscles on the front of the neck into relaxing.

Repeat ten times

Do the exercises every waking hour

Mobility exercises - If you find your neck is stiff when trying any of the following movements you may want to stretch that movement gently to help restore it. You don't need to do every movement unless they all feel stiff. It is however, good advice to go the opposite way to the one you want to stretch as well. For example, if you are stiff looking over your right shoulder in the car you should stretch to the right side into rotation, but you should also stretch to the left side to keep the movement on that side. If you stretch looking down you should also do the one looking up. If you stretch the right ear to the shoulder you should also do the left ear to shoulder.

DO NOT ROTATE YOUR HEAD IN A CIRCLE (circumduction) this is a combination motion of all of the movements in the neck and can grind the small joints (like a pestle and mortar).

Flexion and extension - many people find looking down (flexion) or looking up (extension) difficult. To help restore these movements simply do the movement and hold.

Flexion - a problem looking down - look down until you feel a stretch in the neck. DO NOT go into any pain! Stretch to the edge of pain but not into it. Look down for five to 30 seconds (longer is harder) and relax and repeat five times. Can be repeated hourly. If the symptoms increase you are doing them too hard or holding too long.

Extension - a problem looking up - look up until you feel a stretch in the neck. DO NOT go into any pain! Stretch to the edge of pain but not into it. Look up for five to 30 seconds (longer is harder) and relax and repeat five times. If you get dizzy or light headed whilst looking up seek medical advice and do not continue with this exercise. Can be repeated hourly. If the symptoms increase you are doing them too hard or holding too long.

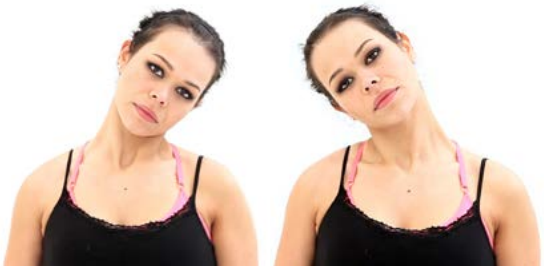
Extension Flexion

Rotation - this is the most common restriction in neck pain. Looking left and/or right can be limited when you have neck pain. To help restore these movements simply do the movement and hold.

Rotation - look left or right until you feel a stretch in the neck. DO NOT go into any pain! Stretch to the edge of pain but not into it. Rotate for five to 30 seconds (longer is harder) and relax and repeat five times. Can be repeated up to hourly. If the symptoms increase you are doing them too hard or holding too long.

Lateral bend - this is not something we do day to day but it can get stiff all the same. Bending left and/or right can be limited when you have neck pain. To help restore these movements simply do the movement and hold.

Lateral bend - bend left or right until you feel a stretch in the neck (this is normally a small motion) DO NOT go into any pain! Stretch to the edge of pain but not into it. Hold for five to 30 seconds (longer is harder) and relax and repeat five times. Can be repeated hourly. If the symptoms increase you are doing them too hard or holding too long.



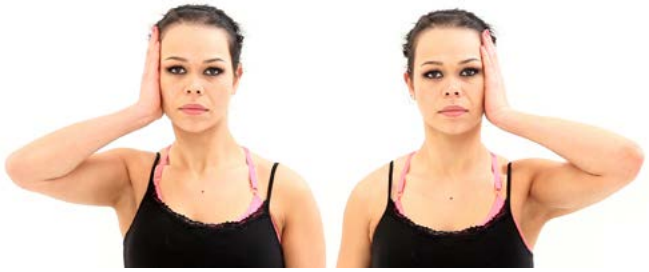
Neck strengthening - Not everyone needs to strengthen their neck but some people find their symptoms reduce and they have fewer future problems if they have stronger neck muscles. The benefits are usually felt after the pain has subsided and the neck starts to improve. Strengthening exercises can be difficult and increase the symptoms in the early stages of neck pain.

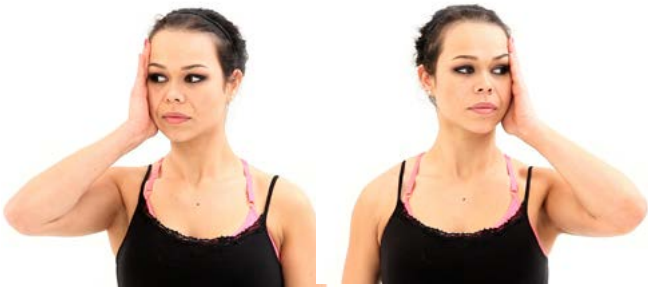
As with stretching there are the same movements that can be strengthened.

Flexion - The easiest way to resist flexion is to use your hand. Simply sit or stand with your head in the middle (neutral) position. Place the palm of your hand on your forehead and push into your hand with your head whilst offering the same resistance back from your hand (there should be no movement). Hold for five seconds and repeat five times. Perform this up to five times per day.

Extension - Normally both hands are used to resist extension (you need good shoulder movement for this). Simply sit or stand with your head in the middle (neutral) position. Place the palms of your hand on the back of the head (you can interlink your fingers) now push into your hands with your head whilst offering the same resistance back from your hands (there should be no movement). Hold for five seconds and repeat five times. Perform this up to five times per day.

Side flexion - Simply sit or stand with your head in the middle (neutral) position. Place the palm of your hand on the side of your head and push into your hand with your head whilst offering the same resistance back from your hand (there should be no movement). Hold for five seconds and repeat five times perform this up to five times per day.





Rotations - Simply sit or stand with your head in the middle (neutral) position. Place the palm of your hand on your cheek and turn into your hand with your head whilst offering the same resistance back from your hand (there should be no movement). Hold for five seconds and repeat five times. Perform this up to five times per day.

Self massage - some people find benefit from 'rolling' the upper back/ lower neck muscles. This self massage can help with tension and 'knots' in the muscles. It is normal to use a small soft ball (like a tennis ball) or a custom ball/roller which can be purchased from many retailers for less than £5. To do this self massage simply stand at a wall and place the ball/roller behind you on the affected area. Apply a pressure which gives relief but not pain (many people like the deep pain this massage can give and even do it so hard they bruise themselves - harder is not necessarily better). Now move your body to 'roll' the ball around on the affected area to relieve the tension. This can be performed for up to ten minutes and as many times per day as you feel comfortable (people tend to do this more in the middle to late stages of getting better).

General advice:

- Tuck your chin back regularly, hold for five seconds and repeat five times. Try to do this at least every hour
- Generally keep changing your position every 20 minutes
- Take your pain medication
- Make sure work surfaces are at a comfortable height so you don't have to look down constantly
- Review your pillows
- Use some heat on it

You may need a consultation!

Neck pain can be very complex and debilitating. Correct advice and treatment can make an enormous difference. If you have arm pain or headache symptoms from your neck contact Physio Med for advice and consultation.

When to seek immediate further advice:

- If the pain has persisted for more than two weeks
- The pain goes down into the arm
- If you have symptoms like headaches

Remember if you try any of the things above and you feel they make you worse not better contact us for individual advice!

PhysioMed
In touch with the way you work

FOOT PROBLEMS

FOOT PROBLEMS

Foot problems account for 5% of the patients accessing Physio Med services from our clients.

Of the foot patients seen:

Domestic: 66%
Work aggravated: 31%
Accidents at work: 4%

The foot is a very stable area, more often than not protected by the footwear surrounding it. However that inherent stability and protection can each have negative effects if they are compromised in any way.

Key facts

- Foot problems in the general population are very common
- Many foot problems are postural and develop slowly over time
- Treatment methods like stretching and strengthening often are not effective
- Many foot problems resolve over time, but this period of time can be very variable, ranging from months to years
- Correct support of the foot almost always makes problems feel better
- There are pro-active steps you can take to prevent most foot problems

Most foot problems are either created by an issue in the foot itself (often called an intrinsic problem) or by factors in the environment working on the foot (like footwear choice), known as extrinsic factors.

For example, a runner has naturally flat feet (which is an intrinsic problem) but then runs on concrete (a bad extrinsic factor). Their choice of footwear can then affect either factor. For example, supportive footwear decreases the intrinsic factor, but old supportive footwear makes the impact on the concrete harder, so increases the extrinsic factor. Unfortunately, these factors go on and on and can be very involved.

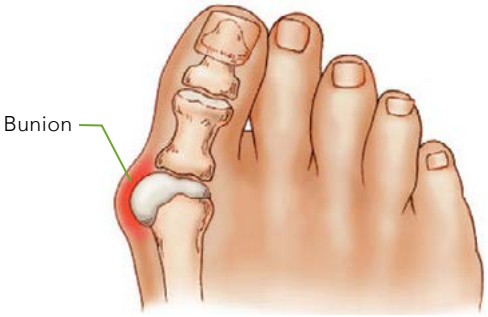
Intrinsic problems:

The big toe:

Degeneration of the big toe joint is a common problem often referred to as bunions (hallux valgus). It is believed that half of the UK population suffers from this problem to some degree.

It normally starts as a lump on the side of the big toe joint.

This can then become painful and/or swollen with redness and heat in the later stages.



Many clinicians believe that narrow, high heeled shoes contribute to this problem as women have more incidence of bunions than men.

Self-help:

Footwear - The right shoes are critical if you have a bunion, or if you want to prevent one. High heels push your foot forwards in your shoe affecting the position of your toes. Narrow shoes squeeze your toes together. Try to wear flat shoes with a wider front section that allows some give (not patent leather), so your toes can freely move.

Bunion pads are cheap and readily available over the counter at the pharmacist or in the supermarket. Place one over the painful area to give it some protection from the side of your shoes.

A podiatrist (or chiropodist) can make you a custom shoe insert which can be individually moulded to your foot, reducing the pressure and inflammation.

Ice can help with pain relief by controlling swelling (if there is any), and limiting the amount of heat in the joint by moderating the inflammatory process. Anything from the freezer can be used to apply ice. Frozen peas are the most popular as they mould to the area well but ice cubes in a towel or an ice pack can also be used. DO NOT apply any ice directly to your skin, apply the ice through your socks (this is because ice can stick to skin). Ice should be applied to the foot for approximately 15-20 minutes no more than once in any hour. Apply as many times as possible until the symptoms of pain/swelling/heat go away. Ice can also be applied as an ice foot bath by placing water and ice cubes in a bowl then immersing your foot in the bowl. Most people find five mins of an ice bath is the equivalent of 20 mins of peas (five mins of an ice foot bath can be very hard to tolerate due to the pain).

Exercises:

As with all exercises some are harder than others and some suit some people and not others. The general rules for exercise are:

- If an exercise hurts, **stop**
- Can't get the exercises to work for you? See a physiotherapist for specific advice!

Toe stretches – you can gently mobilise your own big toe. Remember this might make it feel better but will not cure the bunion.

Hold your big toe and pull it up. Do not pull into any pain. Hold for 5-30 seconds, longer is harder. Repeat five times. Perform up to five times per day.

Calf tightness (stiff ankle)

This problem normally manifests itself first thing in the morning as you get out of bed, go up the stairs or go uphill.

Self-help:

Footwear – Once again, heels can be a major factor in this problem. High heels keep the ankle pointing down all of the time, tightening the calf muscles and making the front of the ankle stiff. Try to wear flat shoes whenever possible.

Stretches – there are two simple calf stretches that are effective for this problem:

Stand at a wall and lean against it with your hands. Put the tight ankle/calf back and keep the knee straight. Place your other leg nearer the wall and bend the knee. Keeping your back leg straight and your heel on the floor, lean forwards to feel the stretch in the back leg. Hold for a count of 30. Relax and repeat five times. Do this five times per day (these are most effective just as you get out of bed and just before you go to bed).

This is a variation of the above exercise but it stretches the lower muscle deep in the calf and is equally as useful. Stand in the step standing position. Put the tight ankle/calf back but now keep the knee bent. Place your other leg nearer the wall and bend the knee. Now bend both knees, keeping your heels on the floor, until you feel the back one stretch. Hold for a count of 30. Relax and repeat five times. Do this five times per day (these are most effective just as you get out of bed and just before you go to bed).

Pain under your heel/foot:

Pain under the heel bone and/or extending down the inside arch of the foot is extremely common (and is medically called plantar fasciitis).

Symptoms of plantar fasciitis include pain along the inside edge of the heel near the arch of the foot. The pain is normally worse when weight is placed on the foot. This is usually most pronounced in the morning when the foot is first placed on the floor.

Prolonged standing can increase the pain. It may feel better after activity but most patients report increased pain by the end of the day. Pressing on the affected part of the foot normally causes tenderness/pain. Pulling the toes back towards the face can be very painful.

Self-Help

Ice can help with pain relief, controlling swelling (if there is any), and limiting the amount of heat in the area by moderating the inflammatory process. Although anything from the freezer can be used to apply ice and frozen peas remain the most popular method (as you can simply place your foot on them), probably the most effective way to apply ice to the bottom of the foot is to use a frozen bottle.

Take a small water bottle and fill it two thirds full. Freeze it then place it on the floor. Now roll your foot over the bottle so it goes up and down the foot (movement stops the ice from sticking). Do this for one-20 mins as tolerated and as often as you can - but not more than once an hour.

If you are using peas, ice cubes in a towel or an ice pack, DO NOT apply the ice directly to your skin (this is because ice can stick to skin). Apply the ice through your socks to the foot for approximately 15-20 minutes but not more than once in any hour. Apply as many times as possible until the symptoms of pain/swelling/heat go away.

Ice can also be applied as an ice foot bath by placing water and ice cubes in a bowl then immersing your foot in the bowl. Most people find five minutes of an ice bath is the equivalent of 20 minutes of peas (five minutes of an ice foot bath can be very hard to tolerate due to the pain).

Pain Killers: Many people find they need pain relief just to walk around and your pharmacist can offer advice on this. Try not to fully mask the pain though, as you may well be doing more damage to the area. DO NOT use pain relief to allow yourself to play sports or perform hobbies like distance walking - this is not good for the foot.

Anti-inflammatories: Many of the problems of the foot respond very well to anti-inflammatories, but remember that long term use can slow the healing process in some structures and so should be used judiciously.

Relative rest is advised, especially from standing, high impact or repetitive activities/exercises involving the 'push off' action of the foot. This may include modifying your work duties for a determined period of time (with the agreement of your manager) to include short periods of sitting down, or using a trolley / vehicle to reduce any loads you may be required to carry.

Being overweight (increased Body Mass Index) is a very significant contributing factor.

Reduce stress on the foot by losing weight. Please seek medical /professional advice if you feel that you need dietary advice. Undertake gentle, reduced weight-bearing activity to aid weight reduction, such as swimming or walking waist deep in a swimming pool, or undertake an upper limb work out while seated, for example.

Extrinsic

Shoes – Not everyone can have a choice of shoe because they have to wear specific footwear. A good example is safety shoes/boots at work. But some general principles apply to choosing footwear. Avoid heels! Choose shoes that provide good support and shock absorption. Trainers or rubber soled shoes are good options. Choose footwear that does not put pressure on the painful area and avoid shoes which do not fasten securely to your feet, such as flip-flops or sandals without a heel strap / support.

Specific footwear - some activities require specific forms of footwear which, if chosen incorrectly, can lead to problems in the foot. A specific example here would be jogging trainers, walking boots, or tennis/rugby/ football boots/shoes. In activities where covering larger distances is involved (like those listed above), protecting your feet is vital. In these situations, specific footwear should be worn but there are different versions of each of these types of footwear.

From an injury prevention perspective, the most important thing to bear in mind with these types of footwear is whether you need any internal support for your foot (that is, support within the shoe). There are three common foot types (postures) which shoe manufacturers make different internal arrangements to accommodate for. Medically they are known as 'posted' shoes. That means they have support built in for a particular foot posture. The most common foot posture is 'neutral'.

This means the shoe is set to the middle position. But you may not have a neutral foot! Your foot may roll towards the inside as you walk and run, known as 'over pronating'. You would now be better in an anti-pronation shoe, or a medially posted shoe in medical terms (this is the second most popular foot posture). Fewer people roll out on their feet but it does happen. This is known as supinating. If you over supinate you would suit an anti-supination shoe, or laterally posted shoe (far fewer of these are produced).

So how would you know? Well, some people say you can tell by how your trainer wears down. Some people find out purely by trial and error (they find a running shoe etc. they like). The easiest way is to go to a specialist trainer/shoe shop and go on a pressure sensing treadmill which will tell you what will best suit you. These machines are not in every shop in every town, but they are readily available and are free to use in most stores (normally you will need an appointment). The ultimate way to correct your foot posture is to use a neutral shoe and insert an orthotic. It is recommended you do this under the supervision of a podiatrist who can give you off-the-shelf or custom-made orthotics (custom are best but more expensive).

Surfaces:

Take into account the surface you are standing/ exercising on and, if soft and unstructured like sand or loose soil, or hard like concrete or tiles, reduce the time spent stood/walking on the surface.

Carrying:

Walking whilst carrying a weight puts more pressure through the foot and can increase foot symptoms. Reduce carried loads by splitting into smaller batches or use a trolley/cart to transfer items without actually carrying them.

Pacing:

Try to take regular breaks. Try to sit for at least one minute in every 20 (the worse your foot is, the longer you will need to sit).

Healing

The healing of the plantar fascia is often slow when compared to other injuries. This is mainly due to its poor blood supply. Activities such as ice bathing, massaging and gentle stretching of the bottom of the foot and calf will help to promote blood flow. Some massages and exercises can help with this.

Plantar fascia massage:


Simply use your thumb to massage up and down the affected area. Use sufficient pressure to feel an effect without creating too much pain (be aware, in some cases there may be pain even with a light touch). Be sensible, if it feels like you are pressing too hard, you probably are. Perform for one-20 mins. Repeat up to three times per day.

As with all exercises, some are harder than others, and some suit some people but not others. The general rules for exercise are:

- Start with the easiest exercises and work your way up
- If an exercise hurts, **stop**
- If you can do an exercise easily, try a harder one
- Can't get the exercises to work for you? See a physiotherapist for specific advice!

Plantar fascia stretch (easy level):

This is similar to the toe stretch but now you stretch the whole foot.


Hold all of the toes and stretch the foot upwards. Use your common sense here - only stretch to the point of discomfort not pain. Hold for 30 seconds, relax, and repeat five times. Perform five times per day. As with all stretches, these are best performed first thing in the morning and last thing before bed.


Ball/roller stretches (intermediate level):

If you are not using the ice bottle method (as above) some self-stretching of the bottom of the foot can be effective. Place a tennis ball, rolling pin, drinks can or similar on the floor with the affected foot on top of it. Roll over the tennis ball from heel to toe. Gently press on the tennis ball as you do the movement. Start by doing this for one-two minutes and build up gradually to five minutes.

Wall stretch (intermediate level):

This is a variation on the calf stretch.

Start by placing your toes on the wall (as seen above) now move the knee on the same side towards the wall and you will feel the stretch. Once again, be sensible! Only stretch to the point of discomfort not pain. Hold for 30 seconds, relax, and repeat five times. Perform five times per day. As with all stretches, these are best performed first thing in the morning and last thing before bed.

Stair stretch (advanced level):

Standing with the balls of your feet on a step, gently lower the heel of the bad leg (use your other foot to take as much of your weight as needed).

You need to be very careful with this exercise as it is easy to over stretch. Only stretch to the point of discomfort, not pain. Hold for 30 seconds, relax, and repeat five times. Perform five times per day. As with all stretches, these are best performed first thing in the morning and last thing before bed.

Strengthening:

Using a towel under the foot curl your toes/foot to crumple the towel. Now go the other way to try to straighten the towel.

Repeat for up to two minutes or until the foot feels tired, whichever comes first. Repeat up to three times per day

Remember, if you try any of the things above and you feel they make you worse, NOT better, contact us for individual advice!

CLIENT NETWORK OVERVIEW

SERVICE LEVEL AGREEMENTS

Our service level agreements assure that we provide the highest level of care possible.

We are continually reviewing our performance and look to improve our service standards on a regular basis.

Patients receive personal attention within four hours.
We provide a single point of contact for the provision of physiotherapy.

Guaranteed treatment within three days.
Much quicker than the national average of 12-14 weeks.

Easy access to clinics within 30 minutes of travelling.
780 clinics and 2,500 chartered physiotherapists nationwide.

Flexible treatment options to suit each patient.
Hands-on treatment, support and condition management.

High quality patient support resources.
Online patient treatment centre. Narrated videos for specific injuries. Illustrated exercise guides.

Fast and safe patient recovery times.
On average our patients are fit to return to work in ten days.

Post injury care.
After care health and wellbeing support, includes access to educational and exercise material.

We follow a process of clinical governance.

OUR VALUES

We work with your values, together we agree a way forward.

Strong Partnerships: Based on Mutuality

We are committed to building, maintaining and enhancing partnerships with all the people we deal with. These people include our staff, customers, network and our suppliers. Our partnerships are based on mutuality and shared benefit. A benefit shared is a benefit that will last.

Excellence in Delivery

Great physiotherapy is at the heart of everything we do. We offer professional, clinical and customer service at levels of excellence which customers should expect from their partners.

Zero Risk

Our clinical expertise, the way we run our business and the evidence we provide gives our customers complete confidence in our ability to deliver safe and secure results.

Leading the Way

As a company driven centrally by the passion of our directors, we are well placed to pre-empt or respond quickly to changing demands in the market, in technology and from our customers. We are at the forefront of innovation for physiotherapy and the support services, which demand excellence.

Return on Investment

Our commitment to excellence, partnership, innovation and eliminating risk drives us to create:

- Increasing clinical and corporate outcomes
- Increasing patient well-being and their potential for work
- Reducing costs of absenteeism and of our service
- Deliver increasing value for money

PROUD OF OUR OUTCOMES

60% of patients are fit to return to work in **ten days.**

Our patients achieve a **60% increase** in productivity.

With our blended physiotherapy™ approach we have a **35% cost saving** against a standard 100% face to face model. With no change to clinical outcomes.

We provide a **return on investment** ratio of **10:1.**

OUR TEAM

There When You Need Us

We have responsive team of account managers and physiotherapists within a network of 780 locations.

Always Communicating

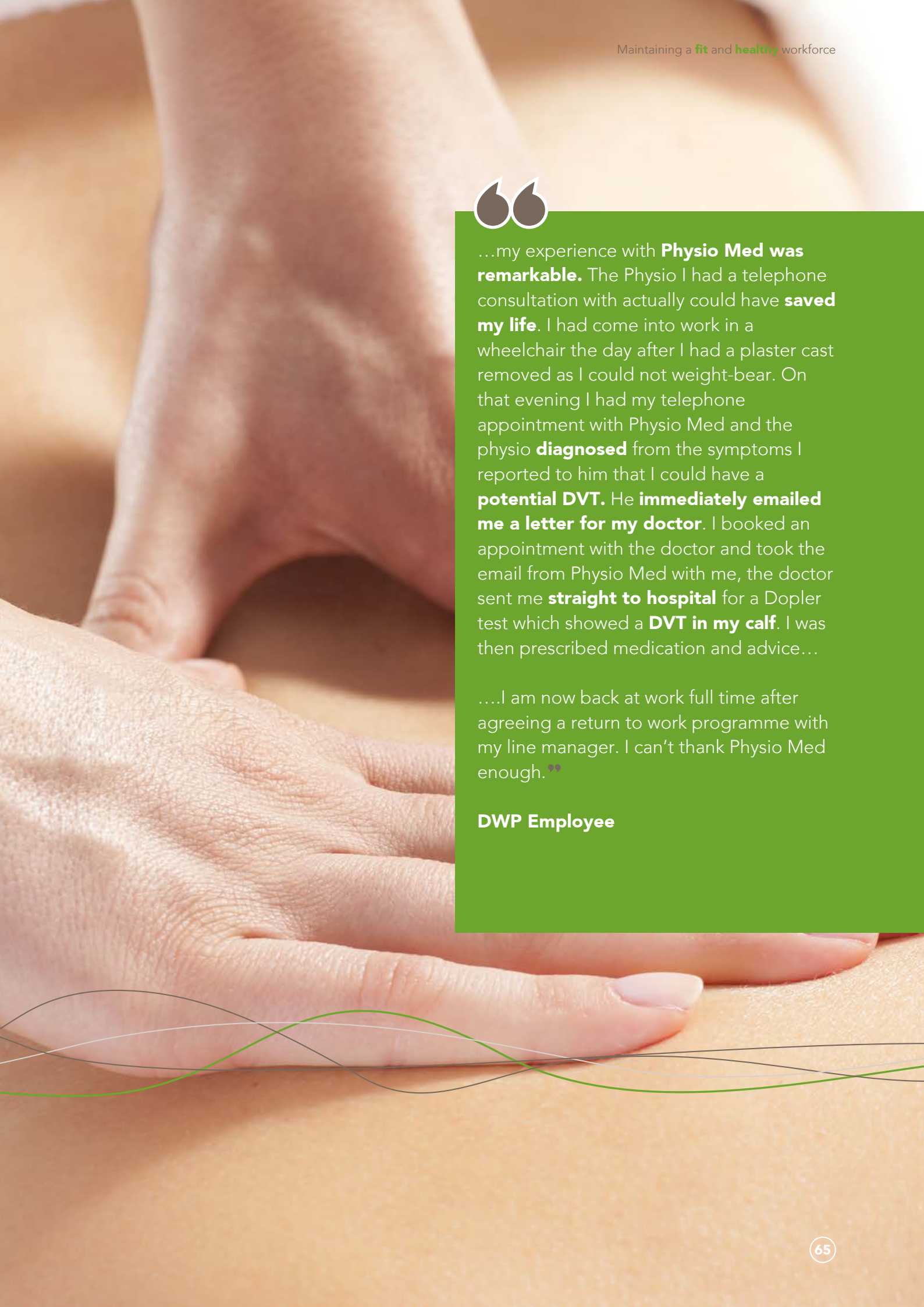
Communication is key to Physio Med. Regular updates, with your account manager and detailed information through our client access portal.

Experience

We have been providing occupational physiotherapy for large employers for 20 years. We continually innovate and improve our services.

Focussed on Results

Our number one goal is to deliver results, everything we do is a contribution to improving health and wellbeing, productivity and profitability.



…my experience with **Physio Med was remarkable.** The Physio I had a telephone consultation with actually could have **saved my life**. I had come into work in a wheelchair the day after I had a plaster cast removed as I could not weight-bear. On that evening I had my telephone appointment with Physio Med and the physio **diagnosed** from the symptoms I reported to him that I could have a **potential DVT.** He **immediately emailed me a letter for my doctor**. I booked an appointment with the doctor and took the email from Physio Med with me, the doctor sent me **straight to hospital** for a Dopler test which showed a **DVT in my calf**. I was then prescribed medication and advice…

….I am now back at work full time after agreeing a return to work programme with my line manager. I can't thank Physio Med enough."

DWP Employee

PhysioMed
In touch with the way you work

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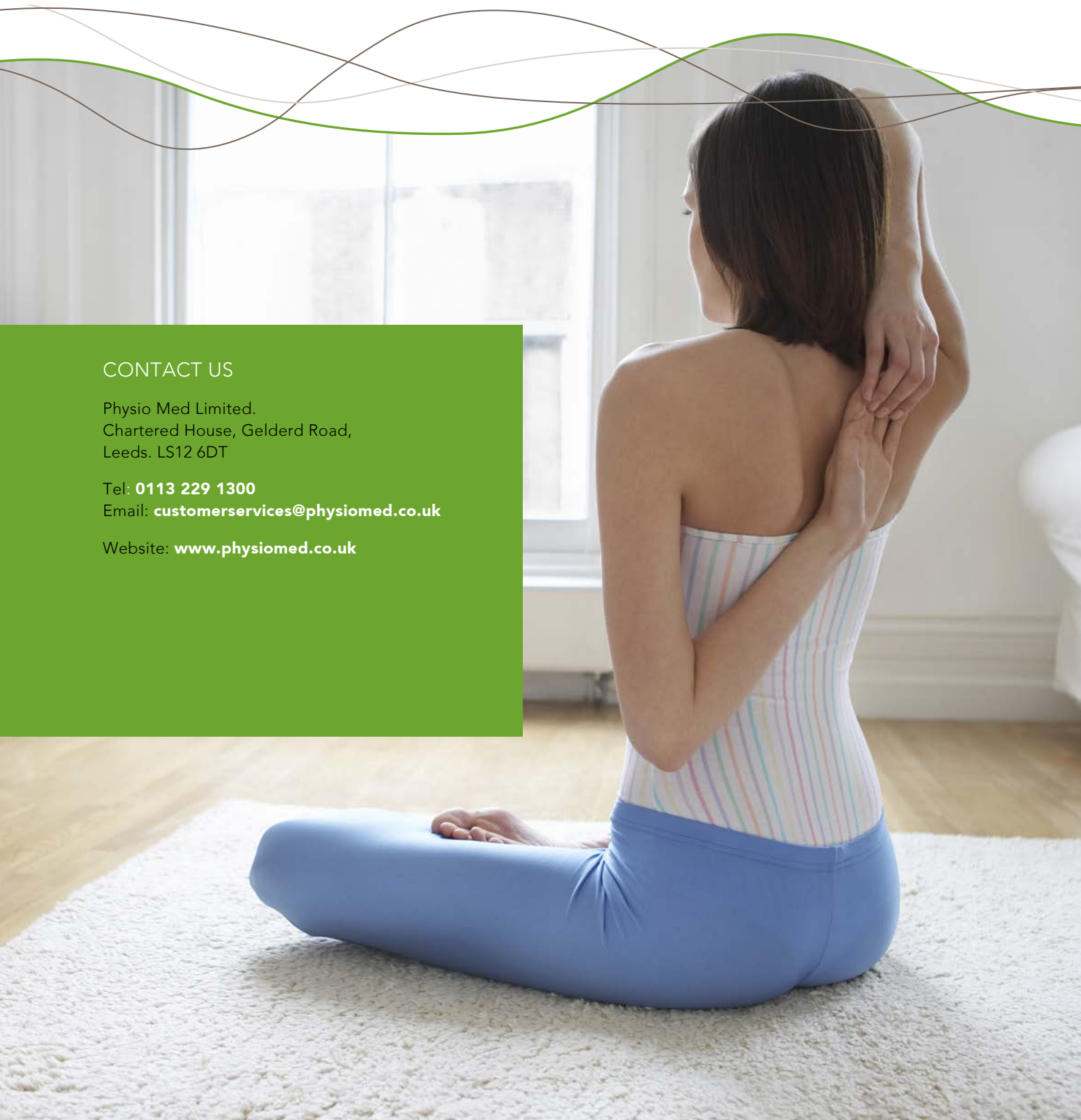
PhysioMed

In touch with the way you work



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