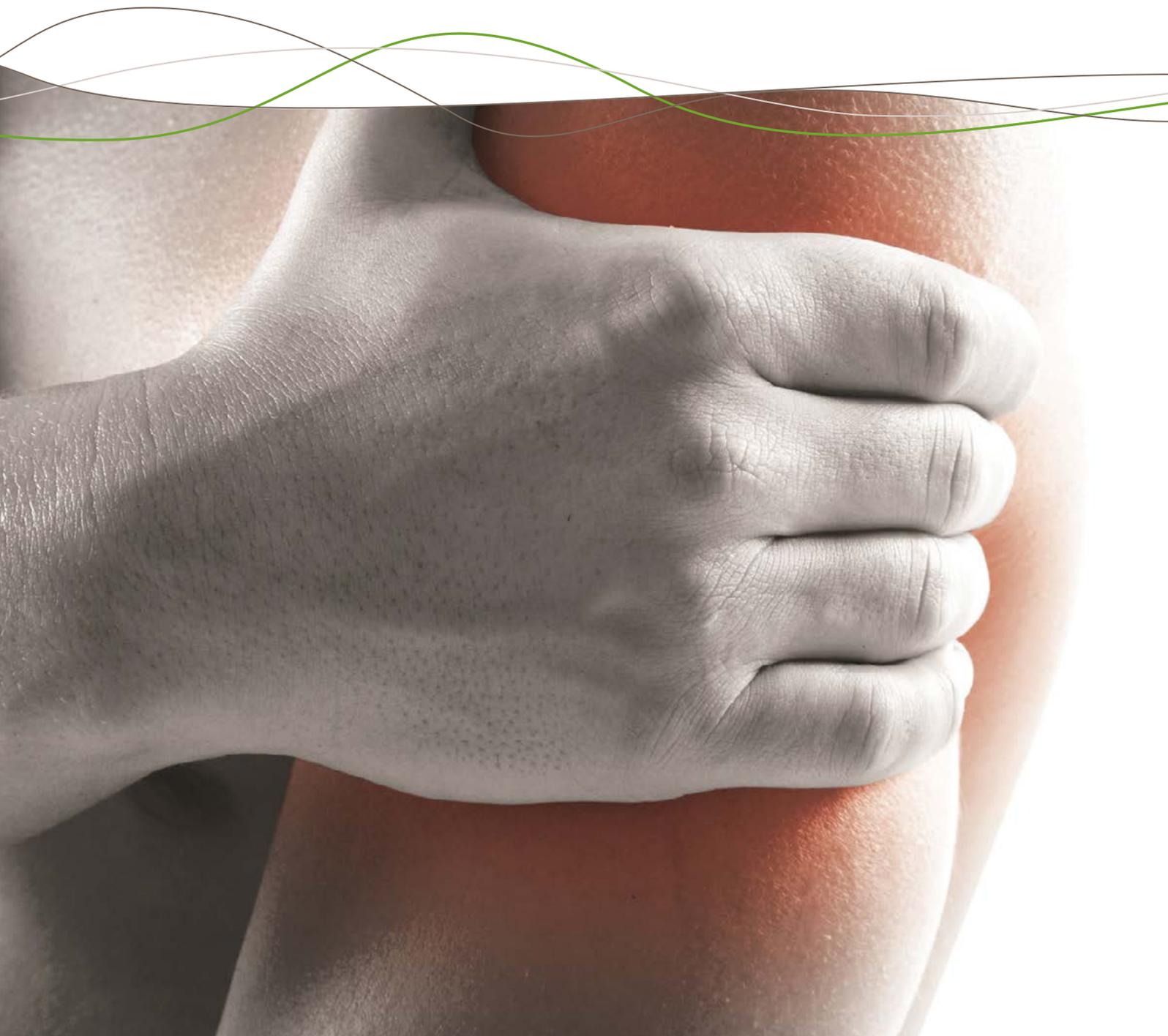


Managing Musculoskeletal Complaints **Shoulder Problems**



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).



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).

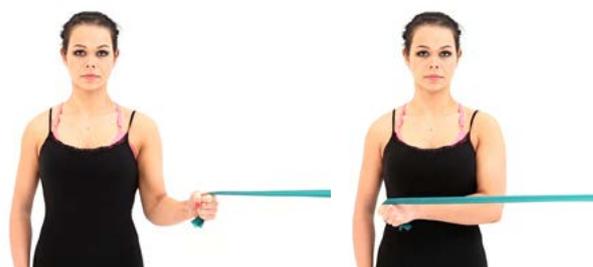


As can be seen in picture A, internal rotation is achieved by placing the hand/wrist onto a door frame and then simply rotating inwards from the shoulder against it. The opposite action is shown in picture B, where the forearm is placed on the frame and the arm is rotated outwards against the immovable 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.

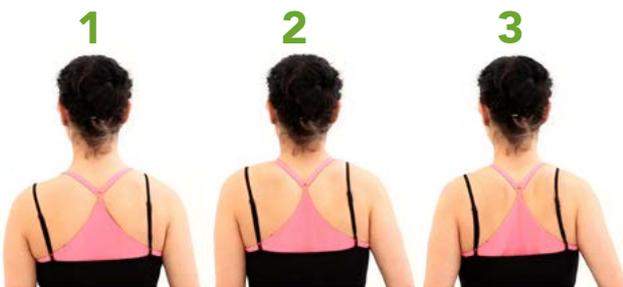
4. Restore scapular control

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.



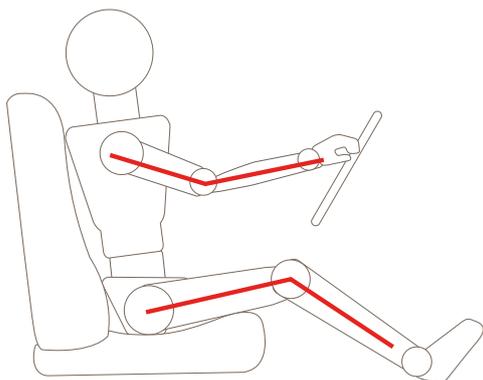
- If you lay mainly on your side and the bad arm is the lower arm, a pillow can help to take weight from it. Most people find this the worst position for sleeping. Try not to tuck your hand under your pillow or your head - this is usually a bad posture. Try to keep the arm at lower than a right angle 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!

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