

## **Patient advice subacromial shoulder pain**

You have been diagnosed with a common condition called subacromial pain. The pain originates from a part of the shoulder that is called the subacromial space (as opposed to the main ball & socket joint). Other terms used to describe subacromial pain can include (though not exhaustive): Subacromial impingement, Subacromial bursitis, Rotator cuff dysfunction or Rotator cuff tendinopathy. The pain is often located on the side of the shoulder and upper arm but can also spread towards the neck or further down the arm.

Research and experience have shown that most patients can overcome the problem by going through a programme of physiotherapy. This includes a range of strengthening exercises to improve the biomechanics of the shoulder. The physiotherapists may also address any problems linked with stiffness, muscle imbalances or postural abnormalities. If you work closely with the physiotherapist and follow their exercise programme regularly, then you have an excellent chance of improving.

Your initial treatment will consist of physiotherapy and (if required) a steroid injection. It can take time for you to notice the benefits of physiotherapy (sometimes between 8-16 weeks). Physiotherapy and a graded exercise programme is your best opportunity to overcome the problem. Make sure you engage in the process. Take ownership of your problem and learn how to help yourself in the long term by working with the physios.

You will be reviewed again in my clinic after 6 months. The treatment options then depend on your symptoms and I will discuss them with you in detail. Typically, the choice is between leaving things alone (with continued home exercises) in patients who do well, or surgery in patients who have significant ongoing symptoms. Repeat injections are not usually offered due to their negative side effects.

Please find below more information to help your understanding of the condition and its treatment:

**Impingement:** This is the most common term used to describe subacromial pain. This is based on the theory that the tendons in the shoulder start rubbing against the surrounding structures like bones and ligaments. In recent years there have been increasing doubts about this mechanical theory of impingement.

**Subacromial bursitis:** The bursa is a layer of soft tissue in the subacromial space that helps the smooth gliding of the tendons, and acts as a buffer or cushion. The bursa is a nerve-rich structure which can cause discomfort if it has become sensitised. Physiotherapy can help improve the biomechanics of the shoulder through a graded exercise programme. Better biomechanics result in less irritability to the bursa, which means less sensitivity, which means less pain.

**Rotator cuff tendinopathy:** This can describe the occasional tendency for some of the cells within the rotator cuff tendon to maladapt and fail to respond adequately to demands placed upon the shoulder. This can affect the function of the rotator cuff and subsequently the biomechanics of the shoulder, which can sporadically cause pain symptoms. Physiotherapy can help modify the tendon



structure that has failed to adapt and improve the function of the remaining tendon so that the effective biomechanics of the shoulder can be restored, and therefore cause less discomfort.

**Rotator cuff dysfunction:** This describes the subtle changes in the biomechanics of the shoulder as a result of a rotator cuff tendinopathy (see above) and/or subacromial bursitis (see above).

Physiotherapy is aimed at improving the biomechanics of the shoulder (through a graded strengthening programme) in order to ease the pain sensitive structures.

**I've been told there is a bony spur!** Bony spurs can form in various areas of the body as part of the normal ageing process. In the past it's been thought that a bony spur at the front of the bony shoulder roof (the acromion) can pinch the tendons (impingement) and produce pain. More recent research casts doubt on this theory and suggests that good rotator cuff function and biomechanics is adequate to make any bony spurs inconsequential. Most patients get better without having to remove the bony spur by engaging in the process of physiotherapy.

**Calcific deposits:** Some patients form calcium deposits in the rotator cuff tendons (a condition also known as calcific tendinitis). Calcific tendinitis is totally different to subacromial pain in terms of the pathology, the symptoms, and the treatment.

**I'm already quite strong – how is physiotherapy going to help me?** It's not about strength alone. Physiotherapy aims at restoring the biomechanics and control of the shoulder complex by addressing muscle imbalances and postural abnormalities that can contribute to subacromial shoulder pain.

**I'm working in a heavy manual job – how is physiotherapy going to help me:** Chronic overuse can be a difficult problem to address. But a graduated rehab process with physiotherapy can improve the biomechanics and function of your shoulder, thus reducing pain levels. Some patients however may have to accept that neither physiotherapy, nor injections or surgery can alter the fact that a heavy manual job results in too much strain on an ageing shoulder. Reducing the workload is then the only way of helping with pain symptoms.

**Partial thickness tears of the rotator cuff:** This is a quite common finding on scans. Partial thickness tearing (a small tear that doesn't extend all the way through the tendon) can be a normal part of the ageing process of rotator cuff tendons. This is often (but not always) a painless issue, as most individuals that have partial tears in their rotator cuff exhibit no pain symptoms. Surgery for this issue is not routinely indicated unless there is a prominent full thickness tear (a tear that extends all the way through the tendon that significantly effects its function). Think of the tyres on your car: you wouldn't replace them if they were worn a little bit, you would only replace them if they are badly worn out. Physiotherapy can help to recruit the good part of the tendon & muscles to help compensate for these deficiencies.

**Steroid injections:** Steroid (Corticosteroid or Cortisone – it's the same) injections reduce pain and inflammation in the subacromial space, but don't heal the underlying issue that has caused the discomfort. The injection can be useful to reduce pain levels for a while, which makes it easier for



patients to go through the physiotherapy rehabilitation process successfully. It creates a window of opportunity that allows you to exercise in less discomfort. The effect of the injection typically wears off after 6-12 weeks. Usually only one injection is carried out, as repeated steroid injections can damage the tendons (this is in line with national recommendations). Not every patient needs an injection. Patients with lower pain levels are often able to go through the rehabilitation process without requiring the added pain relief from an injection.

**Repeat injections:** Injections don't cure the problem (see above); they only reduce pain levels for a short period of time. Since repeated steroid injections can damage the tendons, we recommend injecting only once. A second injection is only rarely indicated in the following scenarios:

1: Patient had a steroid injection in the shoulder clinic with an initially good response. The effect wears off after 6-8 weeks making it difficult to engage in the rehab process. Contact my secretary on 07935 480188 to arrange for a second injection.

2: Patient started Physio without an injection but realises that pain prevents them from engaging in the rehab process. Contact my secretary on 07935 480188 to arrange for a second injection.

**Physiotherapy:** This is essential in the treatment of subacromial pain. Make sure you fully engage in the process. The physiotherapist will teach you a range of exercises. This will include exercises to strengthen and mobilise your shoulder in order to improve muscle balance and joint biomechanics. The Physiotherapist will discuss with you how often and how many times you need to complete each exercise. They will also explain the significance of pain, and how despite some exercises causing discomfort, this doesn't mean you are doing any harm to the area. However, if you feel the exercise programme is making you worse, this doesn't mean the exercises are bad, it might just indicate that you're completing them too often or doing too many. If this is the case, contact your physiotherapist and discuss this with them. A good physiotherapist will amend your exercise regime until you can complete the programme without significantly aggravating your pain symptoms.

A good working relationship with your physiotherapist will pay great dividends. Make sure you get an out-patient appointment. Despite everyone's best efforts, it can infrequently happen that a referral gets lost. If you don't hear anything from the physiotherapy department then contact the booking office. Without physiotherapy input you are unlikely to get better. Don't miss the opportunity, especially if you had an injection to reduce pain levels.

**Home exercises:** The physiotherapists will supervise your rehabilitation process. They will assess you and provide you with exercises and advice. Unless you develop a tailored exercise routine at home, you will not see the benefits of physiotherapy. A good physiotherapist will not use machines, acupuncture, or massage as a primary treatment option. None of those options will make you stronger, improve your function or significantly improve your biomechanics, but exercise and muscle activity will.

The physiotherapists will eventually discharge you with advice and a continuation plan; it is up to you to keep up with your home exercises after you have been discharged. This is essential to



maintain the improvements in your symptoms. Learn to help yourself. Good compliance with the exercise programme a few times a week will only take minutes, but will benefit you greatly in the long-term.

**I have to wait a long time before my first physiotherapy appointment:** If there is a long delay between referral and the start of physiotherapy you are welcome to start some simple exercises at home. You can access the exercises on the website of the British Elbow and Shoulder Society via this link: <https://bess.ac.uk/patient-resource-subacromial-shoulder-pain/>. You will find links to printed instructions and Youtube videos. Remember to exercise in your comfort zone. Don't aggravate the pain. Only do those exercises you can do without pain.

**Follow-up in the shoulder clinic:** You will get an appointment through the post to see me again in 6 months. The treatment options then depend on your symptoms and I will discuss them with you in detail. Typically, the choice is between leaving things alone (with continued home exercises) in patients who do well enough, or surgery in patients who have significant ongoing symptoms. Repeat injections are not usually offered due to their negative side effects.

**Surgery:** This is only rarely required and would be the treatment of last resort. Unless you have been through a full course of good quality physiotherapy +/- a steroid injection, you won't be eligible for surgery. Keyhole surgery will remove inflammatory tissue and bony spurs (if they are present and significant). Patients will still need to go through the full physiotherapy rehabilitation process post-operatively to improve the biomechanics of the shoulder and help patients to achieve their rehabilitation goals. Surgery does not always guarantee success. While most patients get better following surgery, many patients will have to accept residual intermittent discomfort in the area. Few patients go through surgery and don't improve their pre-operative symptoms. Keep in mind that there is always a risk of complications, even with keyhole surgery. Time off work following surgery often takes a minimum of 4-6 weeks in a sedentary job but can be 3-6 months in a heavy manual job. It often takes 6-12 months to plateau in the recovery. Surgery is not a quick fix; a lengthy rehabilitation process is still needed. Most patients can avoid surgery by engaging in physiotherapy +/- a steroid injection.

If you should have any questions then please contact my secretary: Tel 07935 480188, email [jfortho.secretary@gmail.com](mailto:jfortho.secretary@gmail.com)