

Subacromial Impingement and Bursitis

Subacromial impingement: the rotator cuff is pinched beneath the acromion.

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What you're feeling

You are likely experiencing a deep ache in the side of your shoulder. This pain often travels down your upper arm. It is caused by subacromial impingement, where tissues get squeezed under the bony roof of your shoulder blade. You may also have bursitis, which is swelling of the fluid-filled sac that cushions this area.

The pain usually worsens when you lift your arm above shoulder height. Simple tasks like reaching for a cup on a high shelf or placing a bag in the boot of your car can become difficult. You might find it hard to sleep on that side. Many patients report that the pain flares up at night, disrupting their rest. It can also feel stiff when you first wake up in the morning.

This discomfort typically builds up after activity. You might feel it more after gardening, painting, or playing sports. The pain often settles with rest, but it can linger. You may notice a sharp catch when you move your arm in certain ways. This happens because the inflamed tissue is being pinched between the bones.

If you have had this pain for at least six months, it is considered persistent. You might have tried rest, ice, or anti-inflammatory medication without lasting relief. Your surgeon will check for specific signs, such as pain when your arm is pushed across your body. They will also look for evidence of mechanical impingement on scans.

It is important to know that your mental health can influence how you experience this pain. However, studies show that patients improve after surgery regardless of whether they have underlying depression or depressive symptoms. The goal of treatment is to relieve the pressure and reduce inflammation. This helps you return to daily activities without the constant ache.

If conservative measures do not help, surgery may be considered. Arthroscopic subacromial decompression is a valid option for those selected according to national guidelines. It aims to reduce pain and improve your quality of life. Your surgeon will use a clinical examination to ensure you are a good candidate for this procedure.

What's actually happening

Your shoulder has a small gap between the top of your arm bone and the bony roof above it. Inside this space sit your rotator cuff tendons and a fluid-filled sac that acts like a shock absorber. When you lift your arm, these structures slide under the bony roof. In subacromial impingement, this space becomes too narrow. The tendons and the shock absorber get pinched or rubbed against the bone every time you move.

This constant rubbing causes inflammation and swelling. The shock absorber becomes irritated, a condition known as bursitis. Your tendons may also develop thickening or small tears from the wear and tear. This is why you feel pain when lifting your arm, especially overhead. The swelling takes up more room in an already tight space, making the pinching worse. It is a cycle of irritation that leads to stiffness and discomfort.

Your surgeon looks for signs of this mechanical pinching. You might have reduced movement or pain during specific strength tests. If non-surgical treatments do not help, we may recommend subacromial decompression. This procedure removes the inflamed tissue and reshapes the bony roof slightly. The goal is to create more room so your tendons can glide smoothly again without being pinched.

We carefully select patients for this surgery based on clear signs of mechanical impingement. Not everyone with shoulder pain needs this operation. We reserve it for cases where the anatomy is clearly causing the problem and conservative care has failed. If you are a candidate, the procedure aims to restore normal movement and reduce pain by addressing the source of the friction.

What we can do about it

Dr Kieran Hirpara, an upper-limb surgeon at Mater Private Hospital Rockhampton, starts with the least invasive options that suit your condition. We begin with self-management and physiotherapy. This is the mainstay of treatment. You will learn exercises to strengthen your shoulder muscles. This helps create more space in the joint. We advise you to change activities that cause pain. You should give this approach at least six weeks to work. If your pain persists, we may extend this period. The goal is to reduce inflammation and improve movement without surgery.

If exercise alone is not enough, we consider medical management. You may take pain medication or anti-inflammatories to control discomfort. We can also offer injections into the shoulder. Cortisone injections reduce swelling and pain. These effects often last for several weeks or months. This can help you participate more fully in physiotherapy. Other injection types, such as hyaluronic acid or platelet-rich plasma, are sometimes used. These aim to lubricate the joint or promote healing. We discuss which option fits your specific symptoms and health history.

Surgery is considered only when conservative care has not given enough improvement. We look for specific signs that you have mechanical impingement. These include pain for at least six months and a positive test result in the clinic. Imaging must also show physical narrowing in the shoulder. If these criteria are met, we may recommend arthroscopic subacromial decompression. This procedure removes bone spurs or inflamed tissue to relieve pressure. It is a valid treatment that reduces pain and improves quality of life for selected patients.

Patients are generally referred to our clinic by their GP; if a physiotherapist has suggested you see us, you will still need a referral from your GP in order to be eligible for the Medicare rebate. A clinic assessment, including history, examination, and imaging where needed, establishes the diagnosis. For degenerative or long-standing problems we usually try non-operative care – activity change, physiotherapy or hand therapy, splinting, and injections – and consider surgery when that has not given enough improvement. For structural or acute problems, surgery may be recommended straight away, without a preceding non-operative trial. We present this as a shared decision, ensuring you understand the potential benefits and risks before proceeding.

What to expect

Your shoulder pain may settle with time, or it may persist. For many people, conservative management is the first step. This includes specific exercise treatment. These exercises are effective and reduce the need for surgery. The benefits of this approach are maintained after 10 years. If your pain does not respond to these measures, your surgeon may consider surgery.

Surgery is typically reserved for cases where pain has lasted at least 6 months. It is also considered if you have a persistently positive Hawkins test. This is a physical exam check for mechanical impingement. Radiologic evidence of this impingement is also required. When these specific criteria are met, subacromial decompression is a valid treatment. It reduces pain and improves quality of life.

If you undergo arthroscopic subacromial decompression, your recovery follows a predictable path. More than 90% of patients manage to return to driving within 4 weeks. You can typically return to work within 6 weeks. If you have calcific deposits removed alongside decompression, it takes longer to return to unrestricted activity without pain. Recovery of subjective shoulder function requires almost 3 months on average in these cases.

Your outlook is generally positive. Patients improved after undergoing subacromial decompression regardless of underlying depression or depressive symptoms. However, the evidence for this procedure is nuanced. There is no current and strong evidence to support subacromial decompression or nonoperative treatment for rotator cuff tendinopathy alone. This requires careful patient selection by your surgeon.

If you are having rotator cuff repair, formal subacromial decompression does not result in improved clinical outcomes up to 2 years. Long-term clinical outcomes were significantly higher in patients treated only with rotator cuff repair. Therefore, this procedure is not routinely added to cuff repairs unless specific mechanical impingement is present.

Arthroscopic subacromial decompression provided no benefit over diagnostic arthroscopy or exercise therapy on return to work in patients with shoulder impingement syndrome. This means that for some, the surgical intervention offers similar functional return to non-surgical paths. Your surgeon will help you decide which path is right for you based on your specific symptoms and examination findings.

When to see someone

Ask for a specialist review if you have shoulder pain that has not improved after six months of rest and other treatments. You should also seek help if you notice weakness, instability, or if the pain stops you from sleeping or working. Specific signs include a persistently positive Hawkins test and evidence of mechanical impingement on scans. See your GP if you experience sudden worsening, locking, or giving way. Early assessment helps your surgeon decide if subacromial decompression is the right choice for your specific symptoms and condition.

In more depth

This section goes further than you need for your own treatment decisions. Subacromial impingement is worth the extra reading because it is the shoulder condition where surgery has been tested against a placebo operation – twice, in large randomised trials – and the result changed practice worldwide.

TWO TRIALS THAT COMPARED THE OPERATION AGAINST PRETENDING TO DO IT

Most surgical evidence compares one operation with another, or with no treatment. Very rarely, a trial compares an operation with a *sham* – the patient is anaesthetised, the arthroscope is inserted, nothing is decompressed, and neither patient nor assessor knows which was done. That design removes the placebo effect of having had surgery, which is substantial.

The CSAW trial randomised **313** patients three ways: arthroscopic subacromial decompression, investigational arthroscopy only, and no treatment. Both surgical groups did better than no treatment, but **the difference was not clinically important** – and **decompression offered no extra benefit over arthroscopy alone** [1].

The FIMPACT trial reached the same conclusion independently. In patients with impingement syndrome, arthroscopic subacromial decompression **provided no benefit over diagnostic arthroscopy at 24 months** [2].

Two well-conducted trials, two countries, the same answer: the part of the operation that removes bone is not the part producing the improvement. Whatever benefit people experienced came from something the sham procedure also delivered.

WHAT THAT DOES AND DOES NOT MEAN

It does not mean the pain is imagined, or that nothing helps. It means the mechanical explanation – that a bone spur is rubbing on the tendon and shaving it away fixes the problem – is not supported as the mechanism of benefit.

That has consequences for how the condition is framed. The term “impingement” itself embeds the mechanical theory, which is why much of the literature has shifted to “subacromial pain syndrome”: a description of where it hurts rather than an unproven claim about why.

SO WHAT IS LEFT

Non-operative treatment carries the weight, and the comparative evidence is mixed enough to be worth reading carefully. In a network analysis of **3,643** patients, arthroscopic decompression with acromioplasty and physical therapy showed better outcomes across pain, patient-reported measures and range of motion, while **corticosteroid injection showed poor outcomes in all three domains** – with the authors recommending physical therapy for patients with significant symptoms [3].

Set against the sham-controlled trials, the reasonable synthesis is that structured exercise is the core treatment; injection may relieve pain in the short term but does not perform well over the longer horizon; and surgery has not been shown to add anything beyond what inserting a camera adds.

WHERE SURGERY STILL HAS A ROLE

None of this applies to a genuine, repairable rotator cuff tear, which is a different diagnosis with its own evidence – covered on the rotator cuff page. The trials above concern shoulders with pain attributed to impingement, not shoulders with a torn tendon. Distinguishing the two is the reason careful assessment matters more here than the choice of operation.

REFERENCES

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CQ HAND + UPPER LIMB

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