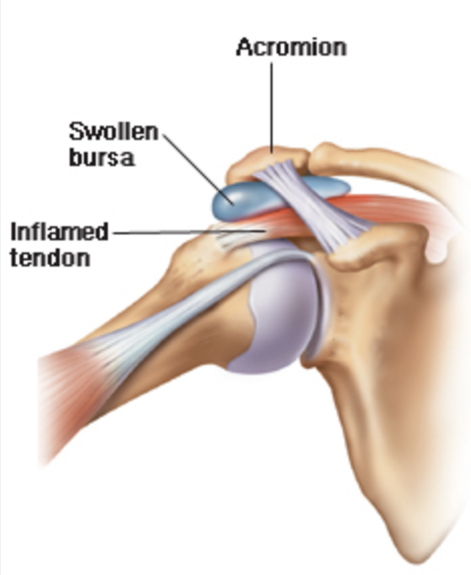
Shoulder pain: should I have arthroscopic surgery?

Is this decision aid relevant for me?

- This decision aid can help if you have shoulder pain due to common causes like rotator cuff tears or bursitis and are considering arthroscopic surgery of the shoulder

Cause and symptoms of shoulder pain

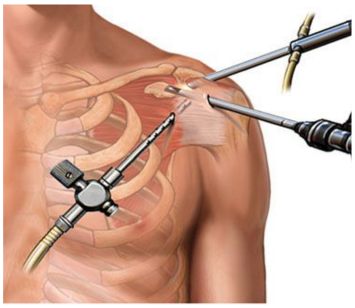
- **Shoulder pain** is commonly caused by rotator cuff tears, swelling of fluid filled sacs call bursa ('bursitis') or impingement.
- Impingement occurs due to contact between a bony part of the shoulder (the 'acromion') and the rotator cuff tendons or bursa (see picture). Contact usually occurs as you move your arm out to the side.
- Shoulder pain often makes it difficult to do simple everyday tasks like reaching into a high cupboard and washing hair.
- Symptoms often take time to settle and one half of patients are better by around 6 months.



What are the treatment options covered in this decision aid?

1. Surgery ('subacromial decompression' and/or 'rotator cuff repair')

Surgery requires admission to hospital and an anaesthetic. The surgeon will make a small skin cut in your shoulder to perform the procedure. Your surgeon may perform one or both of the following procedures:



- **Subacromial decompression:** Increase the space under the acromion by either shaving back some bone, trimming some ligament or removing a bursa
- **Rotator cuff repair:** Reconnecting torn rotator cuff tendons

The surgeon may only decide on which procedure to perform while in surgery.

2. No surgery

You can choose to not have surgery and instead have injections, physiotherapy, medication or wait to see if it improves by itself.

Discloser: Arthritis Australia provided funding to develop this tool but had no involvement in the development process. The developers of this decision aid include orthopaedic surgeons, rheumatologists, physiotherapists, psychologists and occupational therapists. 8/11 developers have a PhD. None of these people will gain or lose anything based on the choices that people make.

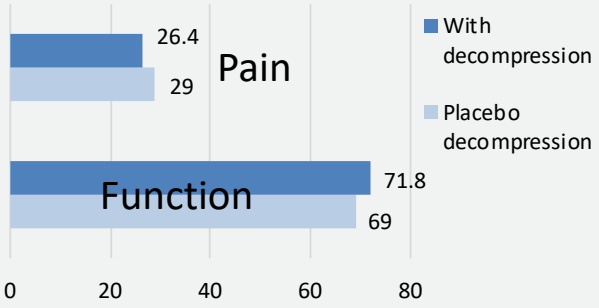
What are the likely benefits of arthroscopic surgery and non-surgical options?

Subacromial decompression vs. placebo

HIGH CERTAINTY EVIDENCE* that subacromial decompression is little-to-no better than placebo…

We are very confident that the figures below represent the true benefits of surgery

Placebo = the patient goes under anaesthetic and the surgeon inserts the surgical tools BUT no further procedure is performed



KEY MESSAGE: On average, surgery leads to **2.6% less pain** and **2.8% better function** compared to placebo surgery at 12 months.

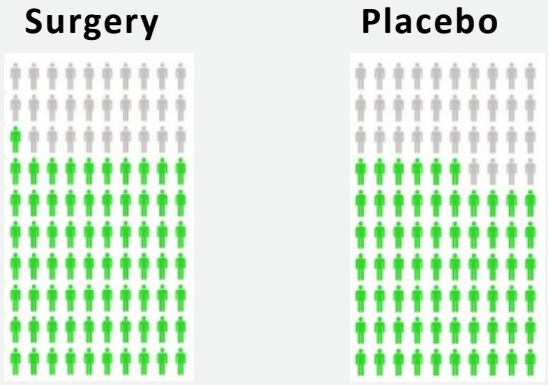
Most patients would not consider these benefits important.

What % of people report treatment success?

treatment success rated by patients

treatment not a success

Each figure represents one person. We can't predict whether you will be one of the people who is helped.



71 out of 100 report success

66 out of 100 report success

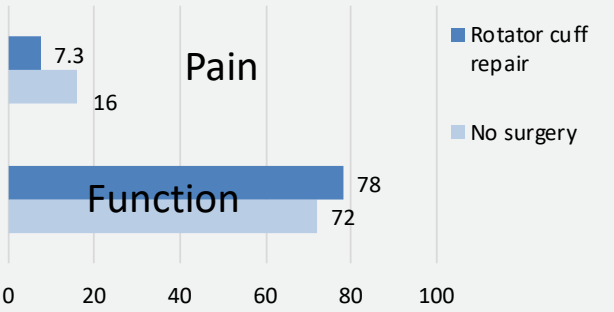
With surgery, **5 more people out of 100** will report their treatment as successful at 12 months.

Rotator cuff repair vs. no surgery

LOW-MODERATE CERTAINTY EVIDENCE* that rotator cuff repair is little-to-no better than no surgery…

We have low-moderate confidence that the figures below represent the true benefits of surgery

No surgery = injections, physiotherapy, medication or no treatment



KEY MESSAGE: On average, surgery leads to **8.7% less pain** and **6% better function** compared to no surgery at 12 months.

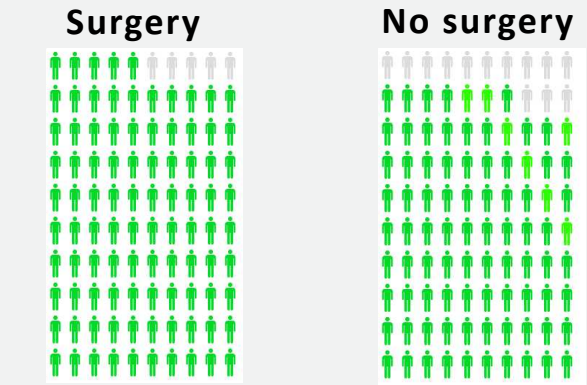
Most patients would not consider these benefits important.

What % of people report treatment success?

treatment success rated by patients

treatment not a success

Each figure represents one person. We can't predict whether you will be one of the people who is helped.



95 out of 100 report success

87 out of 100 report success

With surgery, **8 more people out of 100** will report their treatment as successful at 12 months.

What are the likely harms of arthroscopic surgery?

Each figure represents one person. We can't predict whether you will be one of the people who is harmed.

has serious problems

no serious problems

100 people who **do** have surgery

Based on moderate-certainty evidence, **less than 1 person per 100** that receives arthroscopic surgery will have serious (and potentially life-threatening) problems like infection, nerve injury, deep vein thrombosis, pulmonary embolism, heart attack, stroke and pneumonia.

Where do these estimates of benefits and harms come from?

Estimates of benefits and harms are based on the most up-to-date medical evidence from two reviews of 17 studies and over 2000 people that looked at arthroscopic surgery in people with subacromial pain syndrome.

What practical issues should I consider?

The table shows key practical issues for those who have arthroscopic surgery and those who do not.

	ARTHROSCOPIC SURGERY	NO SURGERY
Procedure and follow-up	Performed by a surgeon in an operating theatre. Requires an anesthetic. Individualised follow-up with wound care and exercise	Advice from a professional about other treatments may be useful (eg. injections, exercise, activity modification, medication)
Recuperation	You may use a sling a few days after surgery. Recuperation typically takes between 2-6 weeks	No recuperation needed
Activity restrictions	Avoid heavy lifting for 7-21 days, overhead activities for 6 weeks and pushing through your hands for 3 months	No activity restrictions
Time off work	Depends on recovery and demands of job. Usually a few weeks after surgery	No time off work
Driving	You can start driving as soon as you feel able to steer. This is normally after one week	No driving limitations
Costs	Out-of-pocket costs for surgery are generally high. There may also be out-of-pocket costs for physiotherapy after surgery	No surgical costs BUT there may be out-of-pocket costs for physiotherapy or injections

Are there other things I can do?

- Strength and endurance exercises for your shoulder might help reduce pain and improve function.
- Modifying your activities and using pain relieving medicines when needed might help reduce pain.
- Seek advice from a health professional about the options that best suit your needs.
- Consider surgery at a later point if the above points do not help

Questions to consider when talking with your doctor…

- ☐ Do I need arthroscopic surgery?
- ☐ What happens if I don't have arthroscopic surgery?
- ☐ Do I know enough about the benefits and harms of:
  - » having arthroscopic surgery of the shoulder?
  - » not having arthroscopic surgery?
- ☐ Am I clear about which benefits and harms matter most to me?
- ☐ Do I have enough information and support to decide?

References

1. Karjalainen TV, et al. Subacromial decompression surgery for rotator cuff disease. Cochrane Database of Systematic Reviews 2019, Issue 1. Art. No.: CD005619.
2. Karjalainen TV, et al. Surgery for rotator cu) tears. Cochrane Database of Systematic Reviews 2019, Issue 12. Art. No.: CD013502.

Last reviewed: … 2019. Update due … 2020. Developed by Dr Joshua Zadro, …. [Institute for Musculoskeletal Health, School of Public Health, The University of Sydney, NSW, Australia.