

Comprehensive Arthroscopic Management (CAM)



Comprehensive Arthroscopic Management preserves the native joint — a joint-sparing option for younger, active patients with advanced shoulder arthritis.

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At-a-glance recovery. Pooled from 12 published studies — your own pace will vary.

LIGHT DUTIES desk work, driving, daily tasks	MOST EVERYDAY ACTIVITIES manual work, sport, gym	FINAL OUTCOME PLATEAU pain and strength
—	12 months	12 months
	Patients can expect to achieve the Minimal Clinically Important Difference (MCID) and Substantial Clinical Benefit (SCB) within one year.	Fifty percent of patients achieve Patient Acceptable Symptom Status (PASS) at the one-year time point.

Why this operation has been suggested

Dr Kieran Hirpara, an upper-limb surgeon at Mater Private Hospital Rockhampton, starts with the least invasive options that suit your condition. 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. We assess you with a history, an examination, and imaging where needed.

For wear-and-tear arthritis of the shoulder, we usually try non-operative care first: changing your activities, physiotherapy, anti-inflammatory medicine, and injections. Surgery is considered when these have not given enough improvement.

Comprehensive Arthroscopic Management (CAM) is a keyhole operation that treats the damaged surfaces and soft tissues inside the shoulder joint. It is typically offered to younger, active people who have advanced arthritis but want to keep their own joint and delay a shoulder replacement. Some people with milder arthritis and significant pain may also be suitable.

The operation aims to reduce pain and improve how your shoulder moves and works. In studies, 76.9% of people who had this operation still had their own joint at a minimum of 5 years afterwards. We will discuss whether it suits you, and you share in that decision.

Before the operation

Before the day of surgery, your surgeon will give you clear instructions to follow. You will need to stop eating and drinking seven hours beforehand. This allows room to bring your operation forward if the theatre list runs early. Some medicines may need to be paused, and your surgeon will tell you which ones and for how long. Bring a written list of everything you take, including tablets, injections and natural remedies. Arrange for someone to drive you home afterwards, as you will not be able to drive yourself. Wear loose, comfortable clothing that is easy to put on over your shoulder. Imaging such as X-rays, MRI or ultrasound may be needed to plan the operation. If you have other medical conditions, you may need blood tests or a review with the anaesthetist.

On the day

You will arrive at the hospital's surgical admissions unit, where you are checked in and prepared for theatre. You will not go to a ward first. The anaesthetist will meet you before the operation and talk you through both parts. This operation is done under general anaesthetic combined with a regional nerve block. You will be fully asleep for the operation, and the block (an injection that numbs the nerves supplying the arm before you wake up) provides pain relief for the first 12 to 24 hours after surgery. You are then taken into the operating theatre, where the operation is performed.

You will wake up in the recovery area, where nurses monitor you while the anaesthetic wears off. Once you are stable, you either go to the ward or go home, depending on the procedure and your recovery. Because the nerve block can numb part of your arm for the first 12 to 24 hours, you will need someone to drive you home, as set out in the previous section.

What the operation involves

CAM is a keyhole operation. Your surgeon makes a few small cuts, each about 1 cm, around the shoulder. A thin camera and small instruments go through these cuts to work inside the joint.

Once inside, your surgeon cleans out the joint. This can include removing loose fragments of cartilage or bone, smoothing the worn joint surfaces, and clearing inflamed tissue. Tight tissue around the joint is released so the shoulder can move more freely. If a nerve at the front of the shoulder is being squeezed by scar tissue, it is freed.

If the tendon at the top of the biceps muscle is worn, it is anchored down into the upper arm bone so it can no longer cause pain. Small holes are made in the bone where cartilage is worn away, which encourages new scar-like tissue to grow and cushion the joint. Bone spurs on the lower part of the ball of the joint are trimmed away.

The small cuts are closed with stitches and covered with a dressing. You will go home with instructions about caring for the shoulder, and the dressing stays on for about 10 days.

After the operation

Most patients stay one night in hospital after this operation, though some are able to go home the same day. You will wake up in the recovery area, then move to the ward. Your arm may feel numb or heavy for the first 12 to 24 hours because of the nerve block. As it wears off, you may feel some discomfort, and the nurses will give you pain relief to keep this manageable. You will go home with your arm supported in a sling. We leave the dressing on for about 10 days; please do not take it off before then unless we tell you to. We change or remove it when we see you. Most people can walk around and do light tasks at home straight away. Please arrange for someone to stay with you for the first 24 hours.

Recovery

For the first day or two, your arm will feel numb and heavy from the nerve block. As that wears off, expect some soreness and swelling around the shoulder. Rest, ice packs and the pain relief plan we give you will keep this manageable. Most people find the discomfort settles steadily over the first couple of weeks.

You will go home with your arm in a sling. Your physiotherapist will guide you through gentle movements early on, then build up to strength work as your shoulder allows. You can walk around and do light tasks at home straight away, but you will need help with things like dressing and reaching overhead at first. Sleeping upright or propped on pillows is often more comfortable in the early days. Keep the dressing dry and leave it alone; we will review it with you.

Recovery happens in stages, and each one is anchored on what your shoulder can do rather than a date on a calendar. As the swelling settles and movement returns, daily tasks become easier. Once your surgeon clears you, typically at the six-week review, you can drive again; see our guide on [Driving after upper-limb surgery](#). Strengthening comes last, once your shoulder tolerates it without a flare of pain.

Everyone heals at their own pace, so your timeline may differ. Your surgeon and physiotherapist will check your progress at each visit and adjust the plan if needed.

What can go wrong

Most patients do well, but problems can occasionally happen. Your surgeon and the team monitor you closely to spot any issue early.

Keyhole shoulder surgery has a low rate of complications overall. Even so, it helps to know what to watch for in the first weeks.

If you already have carpal tunnel syndrome or tendon inflammation in your fingers or hand, tell us before your operation. These conditions make hand and finger problems after surgery more likely. Swelling in the hand can do the same. You might notice tingling, numbness or swelling in your fingers that was not there before. Mention it at your next review, or call the clinic if it gets worse quickly.

Stiffness is the most common problem after keyhole shoulder surgery. Your shoulder may feel tight and hard to move, and the tightness may not ease with rest. If simple movements stay painful and restricted after the first couple of weeks, bring it up at your review. Most stiffness settles on its own without another operation.

Having arthritis in the same shoulder raises the chance of problems, both soon after surgery and later on. This is one reason we talk through the options with you carefully before deciding on this operation.

During keyhole surgery, small tools carry the stitches through the tissue. One of these tools can occasionally break, leaving a small piece inside the joint. You would not usually feel this yourself. It is something your surgeon watches for during the operation and manages there.

The complications table on this page lists typical rates if you want the specifics.

When to call us

Most people recover without problems, but some symptoms need urgent attention. Call us straight away if you have a fever, or if the skin around the wounds becomes increasingly red or starts discharging fluid. Go to emergency if you have sudden severe pain, swelling in your calf, or shortness of breath. Call us if your hand or arm loses feeling, or if you cannot move it at all. If you are unsure whether a symptom is serious, call the clinic and we will help you decide.

Where to read more about the condition

This page is about the operation itself. The condition it treats, including what the evidence shows about when surgery helps and when it does not, is covered in more detail on the [Shoulder Arthritis](#) page.

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Complication rates from published literature

Pooled from 12 published studies. These are population-level rates, not your individual risk — your surgeon will discuss what applies to you.

COMPLICATION	REPORTED RATE	NOTES
progression to arthroplasty	15.8%	17 of 107 shoulders failed arthroscopic management and progressed to total shoulder arthroplasty within 5 years.
progression to arthroplasty	36.8%	Reported in a 10-year follow-up study of 38 patients undergoing comprehensive arthroscopic management.
stiffness requiring intervention	2.3%	1 of 44 patients required surgery for stiffness in a 5-year survivorship study.
revision surgery	2.3%	1 of 44 patients underwent a revision comprehensive arthroscopic management procedure.
infection	0.0%	No infections reported in a 2-year follow-up study of 19 patients.
iatrogenic axillary nerve damage	—	Listed as a potential complication in the description of the comprehensive arthroscopic management procedure.
fluid extravasation into axillary space	—	Listed as a potential complication in the description of the comprehensive arthroscopic management procedure.
incomplete humeral osteoplasty	—	Listed as a potential complication in the description of the comprehensive arthroscopic management procedure.

I have read this information and have had the opportunity to ask Dr Hirpara questions about the procedure, its expected recovery, and the complications listed above.

_____	_____	_____
PATIENT – PRINT NAME	SIGNATURE	DATE