

Subacromial Decompression

Arthroscopic Subacromial Decompression (Acromioplasty) – Post-operative Rehabilitation

Topic scope: Post-operative rehabilitation after **isolated arthroscopic subacromial decompression (ASD / acromioplasty ± bursectomy)**. When a decompression is performed **together with a rotator cuff repair**, the repaired tendon sets the (slower) pace and the **rotator-cuff-repair** protocol takes priority – this page is for the isolated decompression.

Defining principle of this rehab: a subacromial decompression shaves bone and clears bursa – it repairs nothing that needs protecting. So (like a debridement, and unlike a cuff repair or stabilisation) the rehab is an early-movement pathway: a short sling for comfort only, weaned within days, motion and normal light use from day one, and a rapid return of range and function. The aim is to settle the post-operative flare and keep the shoulder moving while it quiets down – rehabilitation, not rest, does the work.

A. THE PROCEDURE & ITS EVIDENCE CONTEXT (important)

Arthroscopic subacromial decompression removes the subacromial bursa and shaves the under-surface of the acromion to “make room” for the rotator cuff, on the impingement model of subacromial pain.

The efficacy of the bony decompression itself is one of the most debated questions in shoulder surgery, and the rehabilitation context cannot be stated honestly without it:

- **CSAW (Beard et al, *Lancet* 2018; n=313, 3-arm)** – a placebo-controlled surgical RCT. Decompression gave **no clinically important benefit over arthroscopy-only (placebo) surgery**, and both surgical arms were only marginally better than no treatment – a difference below the pre-specified minimal clinically important threshold.

- **FIMPACT (Paavola et al, *BMJ* 2018)** – a second placebo-controlled RCT: **no benefit of ASD over diagnostic arthroscopy**, and neither was superior to a structured exercise programme at 2 years.
- **Cochrane review (Karjalainen et al, 2019)** – high-certainty evidence that subacromial decompression provides **little or no clinically important benefit** over placebo for pain, function, or quality of life.

The practical consequence is that **structured exercise/physiotherapy is first-line** for subacromial pain, and ASD is now a **selective** operation – reserved for patients who have failed an adequate non-operative programme or who have a specific mechanical lesion. This does not make a *well-selected* decompression valueless, but it explains why the post-operative emphasis is on **early movement and rehabilitation**, which is what reliably drives recovery.

B. POST-OPERATIVE PHASED TIMELINE (isolated decompression)

A nerve block is commonly used (numb arm for some hours – start analgesia before it wears off). Keyhole wounds; desk-based work commonly resumes within ~2 weeks.

Phase	Window	Sling	ROM / use	Strengthening	Notes
I – Early movement	Week 0–2	Comfort only, off within days (gone by ≤ 2 wk)	Hand/elbow immediately; pendulums + assisted motion as comfort allows; normal light daily use from day 1	–	Settle pain/swelling; ice; analgesia before exercise. No driving while in sling (typically back ~1–3 wk once out of sling + safe emergency stop)
II – Restore range / start strength	Week 2–6	Off	Progress to full active ROM all planes	Begin gentle cuff + scapular strengthening	Range comfortable below shoulder height; most daily activity resumed
III – Strengthening	Week 6–12	Off	Full	Progressive cuff/ scapular loading, band \rightarrow light weight	Heavier and overhead loading built gradually
IV – Return to full activity	Week 12 +	Off	Full	Advanced/sport-specific	Full unrestricted activity typically ~3 months

There is **no construct-protection branch** in the isolated decompression – the only branch is if a **rotator cuff repair** was also done, which converts recovery to the protected cuff-repair pathway.

C. KEY CONTROVERSIES / EVIDENCE QUALITY

1. **Does the bony decompression add anything?** Two placebo-controlled RCTs (CSAW, FIMPACT) and a Cochrane review say it adds **little or nothing over placebo or exercise** for subacromial pain. *Strong (RCT/SR)*. → exercise-first, selective surgery.
2. **Decompression added to a cuff repair** – multiple RCTs show **no added benefit** of routine acromioplasty at the time of arthroscopic cuff repair. *Moderate–strong*.
3. **The post-operative rehab protocol itself** – consensus/expert (institutional protocols), no defining rehab RCT; phase timings are typical, not trial-derived. *Weak/consensus*.

(Patient-facing note: the efficacy debate belongs in this clinician evidence section, not the patient protocol page – surfaced here for the surgeon’s awareness.)

D. EVIDENCE STRENGTH FLAGS (summary)

- **STRONG (RCT / SR):** ASD provides little/no benefit over placebo surgery or exercise (CSAW *Lancet* 2018; FIMPACT *BMJ* 2018; Cochrane Karjalainen 2019); no benefit of added acromioplasty at cuff repair.
 - **MODERATE:** early-motion rehabilitation after isolated decompression (institutional cohorts / consensus protocols, consistent ~3-month recovery).
 - **WEAK / CONSENSUS:** the specific phase/timeline structure of the post-op protocol.
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CITATIONS

RAG CORPUS (180,000+ ORTHOPAEDIC ARTICLES)

- Is acromioplasty justifiable? *Orthop Traumatol Surg Res*. 2019. DOI: 10.1016/j.otsr.2019.10.002
- Indications for Arthroscopic Subacromial Decompression: a Level V evidence clinical guideline. *Arthroscopy*. 2019. DOI: 10.1016/j.arthro.2019.06.012
- The role of subacromial decompression in patients undergoing arthroscopic repair of full-thickness rotator cuff tears. *Arthroscopy*. 2012. DOI: 10.1016/j.arthro.2011.11.022
- Arthroscopic repair of full-thickness rotator cuff tears with and without acromioplasty (RCT). *Am J Sports Med*. 2014. DOI: 10.1177/0363546514529091
- A comparative study of arthroscopic débridement versus repair for Ellman grade I partial cuff tears. *J Shoulder Elbow Surg*. 2020. DOI: 10.1016/j.jse.2020.03.006

LANDMARK TRIALS / REVIEWS (URLS)

- Beard DJ, et al. Arthroscopic subacromial decompression for subacromial shoulder pain (**CSAW**): placebo-controlled 3-group RCT. *Lancet*. 2018. [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(17\)32457-1/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)32457-1/fulltext)
- Paavola M, et al. (**FIMPACT**) Subacromial decompression versus diagnostic arthroscopy for shoulder impingement: randomised, placebo surgery controlled trial. *BMJ*. 2018;362:k2860. <https://www.bmj.com/content/362/bmj.k2860>
- Karjalainen TV, et al. Subacromial decompression surgery for rotator cuff disease. *Cochrane Database Syst Rev*. 2019. <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD005619.pub3/full>

PUBLISHED REHAB PROTOCOLS (BASIS FOR THE PHASE STRUCTURE)

- Kendall C. Arthroscopic Subacromial Decompression Physical Therapy Protocol. OrthoIndy. <https://www.orthoindy.com/wp-content/uploads/Arthroscopic-Subacromial-Decompression.pdf>
- Strauss EJ. Rehabilitation Protocol: Arthroscopic Subacromial Decompression / Distal Clavicle Excision. Sports Surgery New York. <https://www.sportsurgerynewyork.com/pdf/arthroscopic-subacromial-decompression-distal-clavicle-excision-rehab-protocol.pdf>
- Gundersen Health System Sports Medicine. Subacromial Decompression / Acromioplasty Rehabilitation Program. <https://www.gundersenhealth.org/sites/default/files/2022-06/Sports-Medicine-Protocol-Subacromial-Decompression-Acromioplasty.pdf>
- Meisterling RC. Arthroscopic Subacromial Decompression Rehabilitation. Twin Cities Orthopedics. <https://tcomn.com/wp-content/uploads/2016/06/Arthroscopic-Subacromial-Decompression-Rehabilitation.pdf>
- Scott-Dempster C, Harper J. Outpatient Post-operative Physiotherapy Guidelines: Sub-Acromial Decompression. Oxford University Hospitals NHS FT. <https://www.ouh.nhs.uk/media/zidppie2/sub-acromial-decompression.pdf>
- Royal Berkshire NHS FT. Arthroscopic subacromial decompression and/or ACJ excision: discharge advice. https://www.royalberkshire.nhs.uk/media/smegtn3c/arthroscopic-subacromial-decompression-and-or-acromioclavicular-joint-excision-discharge-advice_jul24.pdf