

SHOULDER SUBACROMIAL DECOMPRESSION POST-OPERATIVE GUIDELINE

The following Subacromial Decompression Guideline was developed by HSS Rehabilitation. Progression is both criteria-based and patient specific. Phases and time frames are designed to give the clinician a general sense of progression but do not replace clinical judgement. If a subacromial decompression was performed with a distal clavicle resection the surgeon may have additional restrictions. If the patient has undergone other surgical procedures (such as a rotator cuff repair or SLAP repair) in addition to the subacromial decompression carefully review and refer to the clinical guidelines for those procedures.

The acute phase is focused on protecting the surgical site, regaining pain-free range of motion (ROM), and low-level shoulder girdle strengthening. Phases one and two focus on achieving full shoulder girdle ROM and advancing shoulder strength and stability exercises in preparation for sport specific/recreational activity training. With completion of phase two the patient may advance to phase three which comprises advanced sport specific training, if needed. Cardiovascular endurance, hip and core strengthening should be addressed through the rehabilitation process. The clinician should use their skilled judgement and decision making as progressions may not be linear.

FOLLOW SURGEON MODIFICATIONS AS PRESCRIBED

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Phase 1: Weeks 0-2 (Recovery)

PRECAUTIONS

- Sling adherence: 1-2 weeks or per surgeon orders
 - Sling may be removed for bathing, dressing, or performing home exercise program (HEP)
- Protect surgical site
- Avoid painful motions and pain provoking activities (e.g., sleeping on the shoulder, reaching overhead, reaching behind the back, carrying heavy items)
- If combined with distal clavicle resection avoid horizontal adduction for 8 weeks
- **Avoid 90/90 shoulder position for 8 weeks**

ASSESSMENT

- Quick Disabilities of Arm, Shoulder, and Hand (Quick DASH)
- Numeric Pain Rating Scale (NPRS)
- Incision inspection
- Edema
- Posture
- Scapular positioning and mobility
- Upper quarter neurological screen, including dermatomes, myotomes, reflexes
- Cervical screen
- Upper extremity (UE) passive range of motion (PROM)
- UE active range of motion (AROM), where appropriate
- UE Flexibility
- Manual muscle testing (MMT), where appropriate

TREATMENT RECOMMENDATIONS

- Patient education
- Activity modification
- Shoulder PROM: all motions, pain-free
- Shoulder active assisted range of motion (AAROM): all motions, pain-free
 - Pendulums
 - Table slides in scaption
 - Pulley's
 - Shoulder flexion with cane
 - Shoulder external rotation (ER) with cane

- AROM: cervical spine, shoulder, elbow, wrist, hand (pain-free)
- Strengthening
 - Scapular stabilization exercises: e.g., seated scapula retraction/protraction, Proprioceptive neuromuscular facilitation (PNF)
 - Rotator cuff and deltoid isometrics
 - Grip strengthening
- Cryotherapy, as needed

CRITERIA FOR ADVANCEMENT

- Adherence to precautions and education
- Discharge from sling

EMPHASIZE

- Pain-free with exercise
- Shoulder PROM/AAROM

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Phase 2: Weeks 3-6 (Restoration of ROM)

PRECAUTIONS

- Protect surgical site
- No lying on surgical side
- Avoid painful motions and activities
 - Watch for pain with internal rotation and extension
- If combined with distal clavicle resection avoid horizontal adduction for 8 weeks
- **Avoid 90/90 shoulder position for 8 weeks**

ASSESSMENT

- Quick DASH
- NPRS
- Incision inspection
- Edema
- Posture
- Scapular positioning and mobility
- Scapulohumeral rhythm
- Upper quarter neurological screen, including dermatomes, myotomes, reflexes
- Cervical screen
- Joint mobility: shoulder girdle and thoracic spine
- UE flexibility
- Shoulder PROM
- UE AROM
- MMT, where appropriate

TREATMENT RECOMMENDATIONS

- Patient education
- Cryotherapy, as needed
- Activity modification
- Joint mobilization, as needed
- Scar mobilization pending healing
- Shoulder PROM/AAROM/AROM: achieve full motion
 - Pendulums
 - Table slides in scaption
 - Pulleys
 - Shoulder flexion with cane AAROM
 - Shoulder ER with cane AAROM
 - Behind the back shoulder stretch
- AROM: cervical spine, shoulder, elbow, wrist, hand
- Strengthening
 - Scapular stabilization exercises (e.g., prone row, prone T's, serratus punches)
 - Light scapular resistance exercises (banded rows, shoulder extension to neutral)
- Rotator cuff and deltoid isometrics progressing to isotonic exercises

CRITERIA FOR ADVANCEMENT

- Full shoulder AROM
 - No excessive scapular elevation with shoulder flexion and abduction
- Normal scapulohumeral rhythm
- Pain-free ADLs

EMPHASIZE

- Avoid painful activities
- Full shoulder motion



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Phase 3: Weeks 7-12 (Strength Restoration)

PRECAUTIONS

- Avoid painful motions and activities
- If combined with distal clavicle resection avoid horizontal adduction for 8 weeks

- **Avoid 90/90 shoulder position for 8 weeks**

ASSESSMENT

- Quick DASH
- NPRS
- Posture
- Scapular positioning and mobility
- Scapulohumeral rhythm
- Joint mobility – shoulder girdle and thoracic spine
- UE Flexibility
- UE PROM
- UE AROM
- UE MMT, may include handheld dynamometry (HHD) assessing limb symmetry
- Athletic Shoulder Test (ASH Test) pending symptoms, ROM, and clinical decision

TREATMENT RECOMMENDATIONS

- Patient education
- Cryotherapy, as needed
- Activity modification
- ROM/flexibility exercise continuation to maintain full motion
- Joint mobilization, as needed
- Scar mobilization, as needed
- Strengthening
 - Scapular stabilization exercises (e.g., prone row, prone I-T-Y, serratus punches)
 - Rhythmic stabilization
 - Isotonic rotator cuff strengthening (e.g., sidelying ER, resistance band ER/internal rotation (IR))
 - PNF
 - 90/90 strengthening (at 8 weeks)
- Initiate closed chain exercises and standing plyometric exercises (weeks 8-12)
 - Closed chain exercise progression (wall→incline→floor)
 - Standing plyometric progression (chest pass→overhead→double hand chops)

CRITERIA FOR ADVANCEMENT

- Pain-free with ADLs
- Normalized scapulohumeral mechanics
- Full pain-free shoulder ROM
- 5/5 UE MMT or comparable LSI to contralateral UE

EMPHASIZE

- Avoid tissue irritation
- Scapular stability
- Achieve full shoulder ROM
- UE strength

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Phase 4: Weeks 13+ (Restoring Prior Level of Function)

PRECAUTIONS

- Avoid painful motions and activities

ASSESSMENT

- Quick DASH
- NPRS
- PROM
- AROM
- Posture
- Scapular positioning and mobility
- Scapulohumeral rhythm
- Joint mobility: shoulder girdle and thoracic spine
- UE flexibility
- MMT, may include handheld dynamometry, assessing limb symmetry
- Closed kinetic chain stability test (upper and lower extremity)
- ASH Test
- Seated Shot-Put Test
- Y-Balance Test

TREATMENT RECOMMENDATIONS

- ROM and strengthening exercise continuation
- Closed chain exercises: bilateral to unilateral progression
- Plyometric exercises: bilateral to unilateral progression
- Initiate sport specific exercises
 - Interval throwing program
- Consider collaboration with Performance Specialist

CRITERIA FOR DISCHARGE

- Pain free ADLs and/or sport specific training
- Full return to sport
- Independent with comprehensive HEP

EMPHASIZE

- Gradual return to activities/sports

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References

1. Christiansen DH, Falla D, Frost P, et al. Physiotherapy after subacromial decompression surgery: development of a standardised exercise intervention. *Physiotherapy*. 2015;101(4):327-339.
2. Christiansen DH, Frost P, Falla D, et al. Effectiveness of standardized physical therapy exercises for patients with difficulty returning to usual activities after decompression surgery for subacromial impingement syndrome: randomized controlled trial. *Phys Ther*. 2016;96(6):787-796.
3. Dong W, Goost H, Lin XB, et al. Treatments for shoulder impingement syndrome: a PRISMA systematic review and network meta-analysis [published correction appears in *Medicine (Baltimore)*. 2016 Jun 10;95(23):e96d5]. *Medicine (Baltimore)*. 2015;94(10):e510. doi:10.1097/MD.0000000000000510
4. Nazari G, MacDermid JC, Bryant D, et al. The effectiveness of surgical vs conservative interventions on pain and function in patients with shoulder impingement syndrome. A systematic review and meta-analysis. *PLoS ONE*. 2019;14(5):1-22. doi:10.1371/journal.pone.0216961
5. Paavola M, Kanto K, Ranstam J. For the Finnish Shoulder Impingement Arthroscopy Controlled Trial (FIMPACT) Investigators, et al. Subacromial decompression versus diagnostic arthroscopy for shoulder impingement: a 5-year follow-up of a randomised, placebo surgery controlled clinical trial. *Br J Sports Med*. 2021;55:99-107.
6. Goldenberg BT, Goldsten P, Lacheta L, Arner JW, Provencher MT, Millett PJ. Rehabilitation Following Posterior Shoulder Stabilization. *Int J Sports Phys Ther*. 2021 Jun 1;16(3):930-940. doi: 10.26603/001c.22501. PMID: 34123543; PMCID: PMC8168996

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