

Non-operative Treatment of Subacromial Impingement Syndrome (SIS) - Rehab Protocol

SIS is a chronic inflammatory process that most often involves the rotator cuff tendon(s), especially supraspinatus, and/or the subdeltoid bursa being compressed against the coracoacromial ligament and/or the anterior acromion when the arm is raised above the head or in abduction along the painful arc. SIS is commonly seen in individuals who use their arm repetitively above shoulder height. This document serves as a guide for conservative management of SIS and is intended to help patients achieve maximal function within a minimal timeframe. Patient compliance is essential for optimal success. The following protocols are meant as a guide and are not a substitute for clinical judgment.

Stage I - avoid activity that causes an increase in symptoms

Goals: (1) relieve pain and inflammation, (2) normalize range of motion, (3) re-establish muscular balance, (4) patient education, (5) improve posture, (6) patient "buy-in" to active participation

Range of Motion:

- PROM (as tolerated to minimize inflammation)
 - flexion and elevation in scapular plane
 - ER/IR in scapular plane at 45° abduction - progress to 90° abduction
 - horizontal abduction/adduction
- pendulum exercises
- AAROM limited to symptom free ROM
 - Rope and pulley
- pectoralis minor stretching

Patient Education:

- activity level, appropriate activities
- avoidance of overhead activity, reaching, lifting
- postural awareness (forward head correction, scapular retraction, lumbar roll for sitting)

*progress strengthening exercises with decreased pain/symptoms, normalized ROM, elimination of painful arc, and muscular balance

Joint Mobilizations:

- inferior/posterior glides in scapular plane
- establish balance in glenohumeral joint capsule

Modalities:

- cryotherapy
- iontophoresis

Strengthening Exercises:*

- rhythmic stabilization exercises for ER/IR
- rhythmic stabilization drills Flex/Ext
- ER strengthening
- ER, IR, Abduction isometrics
- scapular strengthening
 - retractors, depressors, protractors

Stage II – progress to full shoulder exercise program, emphasizing rotator cuff and scapular stabilizer strengthening

Goals: (1) non-painful ROM, (2) normalized arthrokinematics and (3) strength, (4) maintenance of reduced inflammation

Range of Motion:

- PROM/AAROM (progress to full ROM)
 - flexion/abduction/scaption
 - ER/IR at 90° of abduction
 - horizontal abduction/adduction at 90°
- rope and pulley flexion/abduction

Functional Activities:

- gradual increase in functional activity
- no prolonged overhead activity

Joint Mobilizations:

- continue mobs for tight joint capsule
- grade II, III, IV mobilizations
- inferior, anterior, and posterior glides

Modalities: (as needed)

- cryotherapy
- ultrasound
- iontophoresis

Strengthening Exercises:

- ER tubing
- side lying ER
- prone horizontal abduction ER
- full can
- shoulder abduction
- biceps/triceps
- prone horizontal abduction
- prone rows
- lower trapezius isolation

Stage III - advanced strengthening protocols

Goals: (1) increase muscular strength/endurance, (2) maintain flexibility/AROM, (3) increase functional activity level

Strengthening Exercises:

- tubing ER/IR
- full can with dumbbell
- side lying ER
- prone horizontal abduction
- prone extension
- push-ups
- biceps/triceps

Flexibility and ROM:

- continue existing ROM protocols
- continue capsular stretching
- maintain/increase posterior/inferior flexibility

Progress to final phase when full ROM is non-painful; and no pain/tenderness; and strength is normalized; and clinical examination is satisfactory.

Stage IV - return to activity

Goal: unrestricted, symptom-free activity

Establish maintenance HEP that includes:

- Daily Flexibility Exercises
 - flexion
 - ER/IR at 90° abduction
 - self-capsular stretches, pectoralis minor
- Resistance Exercise 3 days/week

Patient returns to full sport or overhead activity

- Mindful of posture and pain-free ROM
- Adherence to HEP

*The time frame for each of the stages will vary and should depend foremost upon patient completion of the goals from each stage. Progression through the first 3 stages may take ± 12 weeks.