



# Shoulder Impingement Rehabilitation Program

## 1. Understanding Shoulder Impingement (Subacromial Impingement Syndrome - SAIS)

### What is Shoulder Impingement?

Shoulder impingement occurs when the rotator cuff tendons and/or subacromial bursa become compressed between the acromion and the head of the humerus. This leads to pain, inflammation, and restricted movement, particularly during overhead activities. It is commonly associated with repetitive overhead motions, poor posture, or muscle imbalances.

### Muscles Involved

The primary muscles affected in shoulder impingement include:

- Supraspinatus (most commonly affected rotator cuff tendon)
- Infraspinatus
- Teres Minor
- Subscapularis
- Deltoid (affected due to compensatory mechanisms)
- Trapezius and Serratus Anterior (involved in scapular movement and stability)

## 2. Associated Conditions

### Rotator Cuff Pathology

- Rotator cuff tendinopathy: Degeneration or irritation of the rotator cuff tendons, often due to overuse or impingement.
- Rotator cuff tears: Partial or full-thickness tears leading to weakness and pain.

### Subacromial Bursitis

- Inflammation of the subacromial bursa, often co-existing with rotator cuff tendinopathy, leading to increased pain and reduced mobility.

## Osteoarthritis (OA)

- Degeneration of the glenohumeral joint or acromioclavicular joint, contributing to stiffness, pain, and reduced range of motion.

## 3. Best Treatment Options

### Osteopathy & Physiotherapy

A combination of manual therapy, corrective exercises, and pain management strategies can effectively manage impingement.

#### Osteopathic Approaches:

- **Joint Mobilization:** Improving scapulothoracic and glenohumeral movement.
- **Myofascial Release:** Reducing tension in surrounding muscles.
- **Postural Correction:** Addressing kyphosis or forward head posture.
- **Visceral Manipulation:** If postural issues stem from deeper fascial connections.

#### Physiotherapy Approaches:

- **Scapular Stabilization:** Strengthening the trapezius, rhomboids, and serratus anterior to improve mechanics.
- **Rotator Cuff Strengthening:** Targeted exercises to enhance tendon resilience.
- **Stretching & Mobility Work:** Improving flexibility of the pectorals, lats, and posterior capsule.
- **Taping Techniques:** Providing pain relief and neuromuscular feedback.

## 4. Strengthening the Rotator Cuff Muscles

Each rotator cuff muscle plays a key role in shoulder stability and function. Strengthening them individually is crucial for long-term recovery.

### Supraspinatus (Shoulder Elevation & Stability)

- **Isometric Holds:** Holding a light resistance band at 30° shoulder abduction.
- **Scaption Raises:** Lifting weights at a 30° angle from the body.
- **External Rotation with Resistance Band:** Keeping elbow at 90°.

### Infraspinatus (External Rotation & Posterior Stability)

- **Side-Lying External Rotations**
- **Standing Band Rotations**
- **Prone Reverse Flys**

### Teres Minor (External Rotation & Posterior Shoulder Support)

- **Face Pulls with External Rotation**

- Prone External Rotations
- Cable or Band Pull-Aparts

## **Subscapularis (Internal Rotation & Anterior Stability)**

- Internal Rotation with Resistance Band
- Plank with Shoulder Taps
- Cable Press with Internal Rotation Focus

## **5. Final Stage Rehabilitation**

### **Functional & Progressive Strength Training**

Once pain is reduced, integrate compound movements that challenge the shoulder dynamically:

- Push-ups & Shoulder Presses (modified for pain-free range)
- Pulling Movements (Rows, Lat Pulldowns)
- Kettlebell or Dumbbell Carries (enhancing overall shoulder stability)

### **Mobility & Recovery Strategies**

- Foam Rolling & Self-Myofascial Release
- Active & Passive Stretching
- Cold Therapy & Anti-Inflammatory Techniques

## **Conclusion**

Shoulder impingement requires a structured approach combining osteopathic and physiotherapy techniques with progressive strengthening of the rotator cuff and scapular stabilizers. By addressing underlying weaknesses and imbalances, long-term recovery and prevention of recurrence can be achieved.