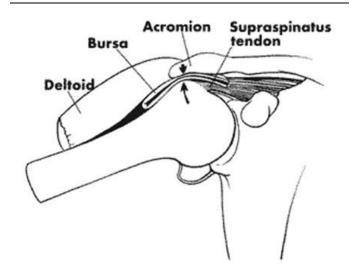
Shoulder impingement syndrome

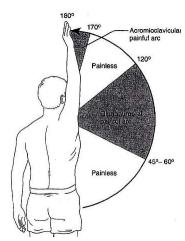
Self-care Guide

Introduction



Shoulder impingement syndrome is a result of several shoulder syndromes including muscle tendinitis (usually supraspinatus muscle), subacromial bursitis, acromioclavicular osteoarthritis, or cuff muscle tear. Shoulder joint consists of scapula and humerus bones which are collected by 4 deep muscles called rotator cuff. When the arm is raised, the supraspinatus muscle tendon will pass through the gap between the

anterior edge of the acromion of scapula and the head of the humerus. During forward elevation of the arm from 60° to 120°, the gap will be narrowed and compressed on the muscle tendon insertion to cause pain.



Cause

Repeated overhead working task, weakness of rotator cuff muscle and variations in the shape of the acromion will lead to prolonged compression and irritation of the subacromial bursa and rotator cuff muscle. Underlying soft tissue structure will inflame slowly and become thickened. Further deterioration will cause rotator cuff muscle fibrosis and calcification or even tendon tear.

Symptom

Inflammation stage

 Pain during shoulder elevation or carrying objects, especially within the painful arc range.
Pain is usually at the anterior of lateral side of the shoulder joint.

Fibrotic stage

 Pain may occur at night and disturbing sleep, especially if lying on the affected shoulder.

Calcification stage

 The range of motion at the shoulder became limited and affecting the daily activities such as combing hair or wearing bar.



Home care program

Acute stage (Active Inflammation stage)

• Ice therapy and rest

Resting pain, night pain, warm and swelling of the shoulder are common at the acute stage. Rest and avoid shoulder elevation, use of ice pad to cover the involved area (3 times per day, lasting 15 min each time) can help to relieve the symptoms.

Chronic stage:

As the active inflammation subsided, home care program can be started according the therapist's instruction:

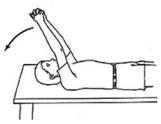
• Hot pad

Cover the shoulder with hot pad (<45°C) for 15 min in the morning and at night can help to improve the circulation and relax the shoulder muscle.

• Posture correction and stretching exercise

Avoid "round shoulder" posture during sitting or standing by keeping your back straight. Stretching exercise should be performed in slow pacing progressively. Sustain the stretching position for 10 sec while feeling of gentle muscle stretch but not the pain, avoid overstretching. Repeated each exercise 10 times.

• Supine on bed, use the good hand to support the affected shoulder to move into



overhead position. Remember to turn the palm to face ground during elevation.

 Stand straight, hand behind back with elbow straight.
Open the chest wall and actively lift the forearm in posterior direction.

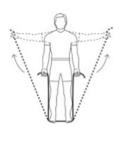


 Place one forearm arm against the corner of a wall.
Lean forwards until a gentle stretch feeling in the anterior chest muscles.



Strengthening exercise

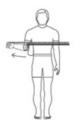
• The rotator cuff strengthening exercise should be done twice a day with an elastic band. Each action should hold for 10 sec and repeated 10 times.



 Stand on the elastic band, keep elbows straight and lift arms to shoulder level along lateral side.



 Secure elastic band at door handle. Close the scapula together and pull arm backwards keeping elbow straight.



 Secure elastic band at door handle. Close the scapula, grasp elastic band in hand with elbow bent to 90° and arm at side.



- i) Rotate arm outward.
- ii) Pull hand inward