SHOULDER ANATOMY

# **Rotator Cuff Injury PROTOCOLS**



### Description

- o Commonly occurs in patients between the ages of 40-70.
- The rotator cuff muscles act to stabilize the head of the humerus and due to their anatomic positioning, are prone to injury.
- Injury can occur due to traumatic event or chronic overuse.

#### Symptoms

- o Pain or weakness with arm movements or overhead activities
- Night pain that disrupts sleep
- O Difficulty reaching or lifting away from the body

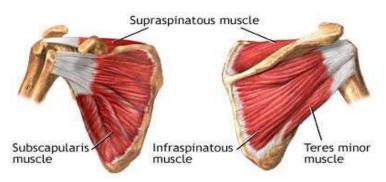
### • Conservative Treatment

- Pain control
- o Rehabilitation
  - Attainment of full range of motion
  - Rotator cuff and scapular strengthening
  - Correction of postural imbalances

#### Hints

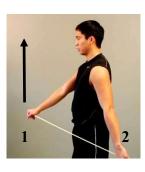
- While performing exercises, keep shoulder rolled back and down
- o Avoid any of the exercises that cause pain or increased symptoms
- o Perform strengthening exercises on alternating days

#### Rotator cuff muscles



Anterior shoulder

Posterior shoulder





#### Passive Forward Flexion

Using a broom or rod, grasp the end with hand 1 and the other end with hand 2

Use hand 2 to passively raise hand 1 up until a stretch is felt Hold the position for 10 seconds and return to starting position

<u>Frequency</u>:

3 sets of 10 reps. 2-3 times a day.

Goal

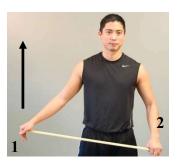
Increase/maintain shoulder range of motion



# **Rotator Cuff Injury PROTOCOLS**



### Passive Abduction





Grasp the end of the rod with hand 1 and the other end with hand 2 Use hand 2 to passively raise hand 1 up to the side until a stretch is

Hold the stretch for 10 seconds and return to starting position

**Frequency**: 3 sets of 10 reps. 2-3 times a day.

**Goal**: Increase/maintain shoulder range of motion.





### **Passive External Rotation**

Grasp the end of the rod with hand 1 and the middle of the rod with hand 2  $\,$ 

Use hand 2 to passively rotate hand 1 to the side while keeping the elbow in

Hold the stretch for 10 seconds and returns to starting position

**Frequency**: 3 sets of 10 reps. 2-3 times a day.

**Goal**: Increase/maintain shoulder range of motion.



### Isometric: Flexion / Extension

Stand with good posture, squeeze shoulders back.
Bend and hold elbow at 90°.

Flexion: Push hand into wall.

Extension: Push elbow into wall.

Hold 5 sec. Repeat **TEN** times.

**Frequency**: 1 set. Three times a day.

**Goal**: Increase strength of Deltoid Muscles.





### Isometric: ABduction / ADduction

Stand with good posture, squeeze shoulders back.

Bend and hold elbow at 90°.

ABduction: Push elbow into the wall

ADduction: Pull hand/forearm into the wall Hold 5 sec. Repeat <u>TEN</u> times.

Frequency: 1 set. Three times a day.

**Goal**: Increase strength of Rotator Cuff Muscles.



# **Rotator Cuff Injury PROTOCOLS**







## Scapular Retraction (Shoulder Blade Squeezes)

Relax head and neck. Stand with good posture, squeeze shoulders back. Avoid shrugging shoulders. Keeps abs tight. Hold 10 sec. Relax shoulder. Repeat 10 times.

Frequency: 1 set. Three times a day. **Goal** 

Increase strength of scapular stabilizing

muscles.





## Scapular Elevation (Shoulder Shrugs)

Relax head and neck. Stand with good posture. Squeeze shoulders up towards your ears. Keep abs tight and hold 10 sec. Relax shoulders. Repeat 10 times.

Frequency: 1 set. Three times a day.

Goal: Increase strength of scapular stabilizing

muscles.





### External Rotation

Attach theraband to a stable object at waist level Roll shoulders back and down and maintain this position Place towel between elbow and side Slowly rotate hand AWAY from the abdomen Hold 3 sec. Repeat 12-15 times

1 set. Three times a day. Frequency:

Goal: Increase strength of scapular stabilizing

muscles.





#### Internal Rotation

Attach theraband to a stable object at waist level Roll shoulders back and down and maintain this position Place towel between elbow and side Slowly rotate hand **TOWARDS** the abdomen Hold 3 sec. Repeat 12-15 times

Frequency: 1 set. Three times a day.

Increase strength of scapular stabilizing **Goal** 

muscles.



# **Rotator Cuff Injury PROTOCOLS**

# Supraspinatus "open can"

Patient stands with theraband under their foot
While grasping theraband, bring shoulders back and down
At a 30 degree angle in front of the body with thumb pointed
up, slowly raise arm to shoulder height
Hold 3 seconds and repeat 12-15 times

**Frequency**: 1 set. Three times a day.

**Goal**: Increase strength of rotator cuff muscles.







## **Shoulder Diagonals**

Patient stands with theraband under their opposite foot While grasping theraband, bring shoulders back and down With your hand at your opposite hip, slowly raise it up across your body, as if you are drawing a sword.

Hold 3 seconds and repeat 12-15 times

**Frequency**: 1 set. Three times a day.

<u>Goal</u>: Increase strength of rotator cuff muscles.



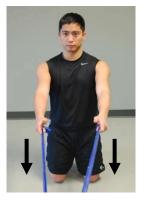


### **Horizontal Rows**

Secure theraband around a stable object, like a pole
Patient can either kneel or stand
Grasp both ends of the theraband,
Bring shoulders back and down
Slowly pull elbows back, squeezing your shoulder blades together
Hold 3 seconds and repeat 12-15 times

**Frequency**: 1 set. Three times a day.

**Goal**: Increase strength of rotator cuff muscles.





#### Shoulder Extension

Secure theraband around a stable object, like a pole
Patient can either kneel or stand
Grasp both ends of the theraband, bring shoulders back and down
With arms extended, slowly pull hands straight down until even
with your hips
Hold 3 seconds and repeat 12-15 times

**<u>Frequency</u>**: 1 set. Three times a day.

Goal: Increase strength of rotator cuff muscles.