Shoulder Impingement Rehabilitation

Phase 1
A. Avoid pain producing activities.
B. Physician prescribed non-steroidal anti-inflammatory medication (NSAID)
C. Iontophoresis with shoulder in mild flexion and mild abduction.
D. Ice, preferably ice massage, before and after range of motion and strength exercises and following any activity which produces pain.

Range of Motion Exercises:
Through pain free movements, performed 2 - 3 times per day.

1. **Codman’s Pendulum Swings**: Lean over table, supporting body with uninvolved arm. Let involved arm hang straight down in a relaxed position. Gently swing arm in circles clockwise and counterclockwise; then in a pendulum motion forward-backward and side-to-side. Repeat 30 times in each direction.

2. **Horizontal Adduction Stretch**: Grasp elbow of involved arm with opposite hand and gently pull involved arm across front of chest just below chin. Hold 5 - 7 seconds and relax. Repeat 5 - 10 times.

3. **Triceps Stretch**: With elbow of involved arm bent and raised, grasp elbow and gently pull involved arm down behind head with uninvolved hand. Hold 5 - 7 seconds and relax. Repeat 5 - 10 times.

4. **Corner Stretch**: Standing and facing corner, abduct shoulders and flex elbows to 90° and slowly lean into corner, stretching chest and front of shoulders. Hold 5 - 7 seconds and relax. Repeat 5 - 10 times.

5. **Standing Adduction Stretch**: While standing, place involved hand behind body. Gently grasp elbow across back with uninvolved hand and slowly pull. Hold 5 - 7 seconds and relax. Repeat 5 - 10 times.
6. **Chicken:** Place both hands behind head and slowly push elbows straight back. Hold 5 - 7 seconds and relax. Repeat 5 - 10 times.

7. **Biceps/Chest:** Stand and grasp a door frame with both arms at shoulder level. Slowly lean away from door, stretching chest and shoulder muscles. Hold 5 - 7 seconds and relax. Repeat 5 - 10 times.

8. **Internal Rotation:** While standing with shoulder abducted to 90°, place T-bar or broom stick behind upper arm and grasp lower bar with involved hand. With uninvolved hand, slowly and gently pull upper bar down, forcing involved arm back and up. Hold 5 - 7 seconds and relax. Repeat 5 - 10 times.

9. **External Rotation:** While standing with shoulder abducted to 90° and elbow flexed to 90°, place T-bar or broomstick behind upper arm and grasp upper bar with involved hand. With uninvolved hand, slowly pull lower bar forward and up, forcing involved arm back and down. Hold 5 - 7 seconds and relax. Repeat 5 - 10 times.

**Phase 2**

**Strength Enhancing Exercises:** Perform 3 times per week using the schedule of sets x repetitions outlines to the right. Do not exceed 7 pounds for weighted exercises.

Complete range of motion stretching exercises prior to and following strengthening exercises.

**Active Flexion:** Stand with elbow straight and thumb facing forward. Raise involved arm upward in front of body as high as tolerable, hold and slowly lower. Repeat as directed.

**Active Abduction:** Stand with elbow straight and thumb pointing out. Raise involved arm outward to side of body as high as tolerable. Hold, then slowly lower to start. Repeat as directed.

**Prone Extension:** Lie prone on stomach with involved arm hanging toward floor. Rotate arm and thumb outward as far as possible. Raise arm toward hip. Do not raise higher than parallel to the floor. Hold, then slowly lower to start and repeat as directed.

**Prone Horizontal Abduction:** Lie prone on table. Rotate arm and thumb outward as far as possible. Raise arm out to the side. Do not raise higher than parallel to the floor. Hold, slowly return to start and repeat as directed.
Supine Internal/External Rotation: Lie supine on table or floor with shoulder abducted to 90° with arm supported on table and elbow flexed. Slowly raise hand up and forward as far as possible. Hold for 1 - 2 seconds and slowly return to start. Attempt to place back of hand on table in “up” position and palm on table in “down” position. Repeat as directed.

Supine Triceps Extension: Lying flat on back with involved elbow bent near head. Rest involved hand on uninvolved shoulder. Slowly extend elbow as straight as possible without moving upper arm. Slowly return to start and repeat as directed.

Supine Press: Lie on back with elbows next to chest and flexed to 90°. Slowly raise and extend arm straight upward. Hold, then slowly return to start. Repeat as directed.

Seated Dips: Sit on edge of table or chair gripping sides of table with hands. Slowly straighten arms, lifting buttocks off of seat. Hold for 3 - 5 seconds and slowly lower to table. Repeat as directed.

Towel Squeeze: Fold a towel into eighths and place between chest and involved elbow. Slowly squeeze arm against towel and chest with forearm crossing in front of body at 45° angle. Hold isometric contraction for 5 - 10 seconds and relax. Repeat as directed.

Shrugs: Standing with arms at sides. Lift shoulders up toward ears and hold, then pull shoulders back, pinching shoulder blades together. Hold and relax. Repeat as directed.

Biceps Curls: With arm straight and at side with palm facing forward, slowly flex elbow bringing hand up toward shoulder as far as possible. Hold, then slowly relax to beginning position. Repeat as directed.

Bent Over Rows: While bent over with back parallel to floor and arms hanging to floor, slowly pull arms up, bringing hands up to chest level. This motion is similar to using a cross-cut saw. Slowly lower arms to start and repeat as directed.

Supraspinatus (Empty Can): Stand with elbow straight and arm rotated inward with thumb pointing down. Raise hand to eye level at 30° angle to body. Do not allow the hand to go above eye level! Hold, then slowly lower to start and repeat as directed.

It is not uncommon for your pain level to slightly increase during the first week of exercising. Continue the program for a minimum of 4 weeks. At the end of 4 weeks, if you do not notice improvement in your condition consult your physician or therapist. If your pain is diminishing, continue the program for 2 - 3 weeks after your symptoms have ceased to ensure the condition does not return.