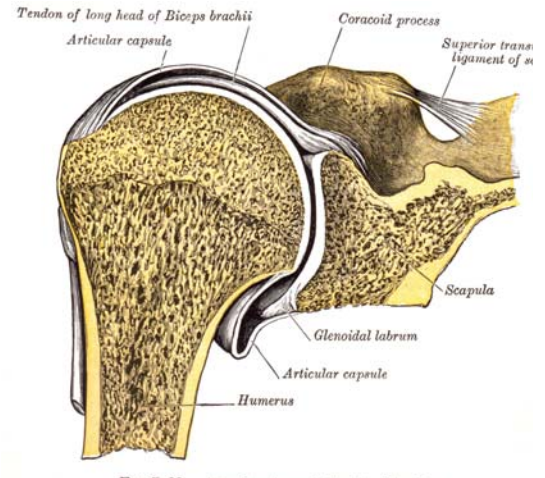


## Arthroscopic Labrum Repair of the Shoulder (SLAP)

### Anatomy

The shoulder joint involves three bones: the scapula (shoulder blade), the clavicle (collarbone) and the humerus (upper arm bone). The humeral head rests in a shallow socket on the scapula called the glenoid. Because the head of the humerus much larger than the glenoid, a soft fibrous tissue labrum called the labrum surrounds the glenoid to help deepen and stabilize the joint. The labrum deepens the glenoid by up to 50 percent so that the head of the humerus fits better. In addition, it serves as an attachment site for several ligaments.



### Injuries

Injuries to the labrum can occur from acute trauma or repetitive shoulder motion. Examples of traumatic injury include:

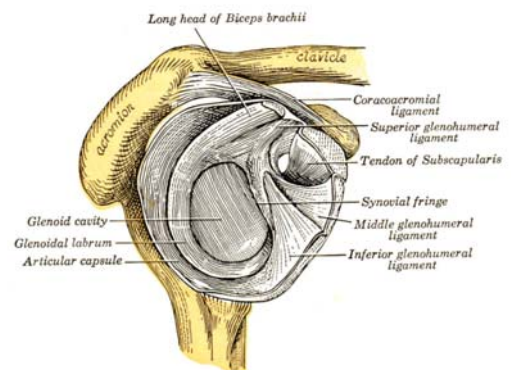
- Falling on an outstretched arm
- Direct blow to the shoulder
- Sudden pull, such as when trying to lift a heavy object
- Forceful overhead motions

Tears can be located either above (superior) or below (inferior) the middle of the glenoid. A SLAP lesion (superior labrum, anterior [front] to posterior [back]) is a tear of the labrum above the middle of the glenoid that may also involve the biceps tendon. A tear of the labrum below the middle of the glenoid socket that also involves the inferior glenohumeral ligament is called a Bankart lesion. Tears of the glenoid labrum often occur with other shoulder injuries, such as a dislocated shoulder (full or partial dislocation).

### Signs and symptoms

It is difficult to diagnose a tear in the glenoid labrum because the symptoms are very similar to other shoulder injuries. Symptoms include:

- Pain, usually with overhead activities
- Catching, locking, popping or grinding
- Occasional night pain or pain with daily activities
- A sense of instability in the shoulder
- Decreased range of motion
- Loss of strength



## **Treatment**

Until the final diagnosis is made, your doctor may prescribe anti-inflammatory medication and rest to relieve symptoms. Rehabilitation exercises to strengthen the rotator cuff muscles may also be recommended. If these conservative measures are insufficient, your doctor may recommend arthroscopic surgery

During the surgery, your doctor will examine the labrum and the biceps tendon. If the injury is confined to the labrum itself, without involving the tendon, the biceps tendon attachment is still stable. Your doctor will remove the torn flap and correct any other associated problems. If the tear extends into the biceps tendon or if the tendon is detached, the result is an unstable biceps attachment. Your doctor will need to repair and reattach the tendon, using suture anchoring devices. If there is a tear below the middle of the glenoid, your doctor will reattach the ligament to the glenoid (Bankart repair).

## **Rehabilitation**

After surgery, you will need to keep your shoulder in a sling for three to four weeks. Your doctor will also prescribe gentle, passive range-of-motion exercises. When the sling is removed, you will need to do motion and flexibility exercises and eventually start strengthening. Athletes can usually begin doing sports-specific exercises after twelve weeks, although it will be about six months before the shoulder is fully healed.

## PREOPERATIVE INSTRUCTIONS

Schedule surgery with the secretary in your doctor's office office.

### Within one month before surgery

- \* Make an appointment for a **preoperative office** visit regarding surgery
- \* A history and physical examination will be done
- \* Receive instructions
- \* Complete blood count (CBC)
- \* Electrocardiogram (EKG) if over the age of 40

### Within several days before surgery

- \* Wash the shoulder and area well
- \* Be careful of the skin to avoid sunburn, poison ivy, etc.

### The day before surgery

- \* Check with your doctor's office for your time to report to the Surgical Day Care Unit the next day (617-726-7500)
- \* **NOTHING TO EAT OR DRINK AFTER MIDNIGHT.** If surgery will be done in the afternoon, you can have **clear liquids only** up to **six hours** before surgery but no milk or food.

### The day of surgery

- **nothing to eat or drink**
- For surgery at MGH main campus in Boston: Report directly to the **12<sup>th</sup> floor of the Lunder Building, Center for Preoperative Care at Massachusetts General Hospital**, two hours prior to surgery.
- For surgery at the surgery center at MGH West in Waltham: Report directly to the **Ambulatory Surgery Center on the second floor of Mass General West.**
- For surgery at the surgery center at Brigham and Women's Hospital/MGH Foxborough **Report directly to the 4<sup>th</sup> Floor**

## Rehabilitation after Arthroscopic Labrum Repair of the Shoulder (SLAP)

### Phase 0: 0 to 2 weeks after surgery

#### POSTOPERATIVE INSTRUCTIONS

You will wake up in the operating room. A sling and an ice pack will be in place. You will go to the recovery room and generally will be discharged after 1-2 hours. You can get out of bed when you wish. Apply ice to the shoulder to reduce pain and swelling. You may remove the sling whenever you wish and gently move the elbow, wrist and fingers. Follow the doctor's instructions regarding moving your shoulder after surgery.

#### GOALS:

1. Control pain and swelling
2. Protect the repair
3. Begin early shoulder motion

#### ACTIVITIES WHEN YOU GO HOME:

1. Apply ice to the shoulder as tolerated to reduce pain and swelling. You can change the dressing to a smaller one to allow the cold therapy to reach the shoulder.
2. Remove the sling on the first day after surgery.  
Move your elbow, fingers and hand several times a day.
3. Begin the pendulum exercise several times a day:



#### Pendulum exercise

Bend over at the waist and let the arm hang down. Using your body to initiate movement, swing the arm gently in small circular motions. Repeat for 2 to 3 minutes at a time.

4. Remove the outer dressing on the second day after surgery and shower. Leave the little pieces of tape (steri-strips) in place. You can get the wound wet after 2 days in a shower, but do not soak in a tub. To wash under the operated arm, bend over at the waist and let the arm passively swing away from the body. It is safe to wash under the arm in this position.
5. Keep your elbow slightly in front of your body; **do not reach behind your body.**  
When putting on clothing, lean forward and pull the shirt up and over the operated arm first. Then put the other arm into the opposite sleeve. To remove the shirt, take the unoperated arm out of the sleeve first, and then slip the shirt off of the operated arm.
6. Call the doctor's office for any concerns, including, but not limited to, severe pain, fevers, chills or redness.

**OFFICE VISIT:** Please arrange to see your doctor in the office 10 days after surgery for examination and further instructions.

## Rehabilitation after Arthroscopic Labrum Repair of the Shoulder (SLAP)

### Phase One: 0 to 4 weeks after surgery

#### Goals:

1. Protect the surgical repair
2. Ensure wound healing
3. Prevent shoulder stiffness
4. Regain range of motion
5. Control pain and swelling

#### Activities:

##### 1. Sling

Use your sling most of the time for the first 2 weeks. The doctor will give you additional instructions on the use of the sling at your post-operative office visit. Remove the sling 4 or 5 times a day to do pendulum exercises.

##### 2. Use of the operated arm

You may use your hand on the operated arm in front of your body but **DO NOT** raise your arm overhead. Avoid extending the arm behind you and avoid putting your arm in a position as if your hands were behind your head. It is all right for you to flex your arm at the elbow but do not lift any objects in excess of 2 pounds or engage in activities that involve forceful use of the forearm such as using a screwdriver. Use of a computer or writing is all right as long as it is not painful.

##### 3. Showering

You may shower or bath and wash the incision area. To wash under the operated arm, bend over at the waist and let the arm passively come away from the body. It is safe to wash under the arm in this position. This is the same position as the pendulum exercise.

### Exercise Program

#### ICE

Days per Week: 7                      as necessary                      15- 20 minutes  
Times per Day: 4-5

### STRETCHING / PASSIVE MOTION

Days per Week: 7                      Times per day: 4-5

#### Program:

Pendulum exercises

Supine External Rotation

Supine assisted arm elevation

Behind the back internal rotation

Isometric exercises: internal and external rotation at neutral

Rhythmic stabilization and proprioceptive training drills with physical therapist

Ball squeeze exercise

Scapular retraction

### Office Visit

Call **617-726-7500** to reach your doctor; **617-643-9999** to reach MGH Sports Physical Therapy.

## Rehabilitation after Arthroscopic Labrum Repair of the Shoulder (SLAP)

### Phase two: the 5 to 7 weeks after surgery

#### Goals:

1. Protect the surgical repair
2. Improve range of motion of the shoulder
3. Begin gentle strengthening

#### Activities

##### 1. Sling

Your sling is no longer necessary unless your doctor instructs you to continue using it (use it for comfort only).

##### 2. Use of the operated arm

You can now move your arm for most daily activities, but you need to continue to be careful not to lift objects heavier than 1 or 2 pounds. You should avoid forceful pushing or pulling activities. You should avoid activities that load the biceps muscle, such as turning a screwdriver or carrying a heavy box. You should continue to avoid reaching behind you or other positions with the hand behind the head.

##### 3. Bathing and showering

Continue to follow the instructions from phase one and the instructions above.

### Exercise Program

#### STRETCHING / ACTIVE MOTION

Days per week: 7

Times per day: 1 to 3

Pendulum exercises

Supine External Rotation

Standing External Rotation

Supine passive arm elevation

Seated-Standing Arm Elevation

Behind the back internal rotation

#### STRENGTHENING EXERCISES

Days per week: 7

Times per day: 1

Theraband internal and external rotation

Standing forward flexion (scaption)

Prone row

Prone horizontal abduction 'T's

Prone extension

Sidelying external rotation

#### Office visit

Please arrange an appointment to see your doctor in 6 weeks (12 weeks from surgery).

Call **617-726-7500** to reach your doctor; **617-643-9999** to reach MGH Sports Physical Therapy.



## Rehabilitation after Arthroscopic Labrum Repair of the Shoulder (SLAP)

### Phase Three: starting 8 to 12 weeks after surgery

#### Goals:

1. Protect the surgical repair
2. Regain full range of motion
3. Continue strengthening progression

#### Activities:

##### Use of the operated arm

You may now safely use the arm for normal daily activities involved with dressing, bathing and self-care. You may raise the arm away from the body; however, you should not raise the arm when carrying objects greater than one pound. Any forceful pushing or pulling activities could still disrupt the healing of your surgical repair.

#### Exercise Program:

#### STRETCHING / RANGE OF MOTION

Days per week: 7

Times per day: 1-2

Pendulum exercises

Standing External Rotation / Doorway

Wall slide Stretch

Hands-behind-head stretch

*Starting the 9<sup>th</sup> week after surgery*

Standing Forward Flexion

Behind the back internal rotation

Supine Cross-Chest Stretch

Sidelying internal rotation (sleeper stretch)

Seated Row

*Start the 11th week after surgery*

Biceps curl

*Start the 9<sup>th</sup> week after surgery*

#### STRENGTHENING / DYNAMIC

Days per week: 7 Times per day: 1

Side-lying External Rotation

Prone Horizontal Arm Raises ‘T’s

Prone row

Prone scaption ‘Y’s

Prone extension

Standing forward flexion “full-can” scaption

Add resistance 1 to 3 lb

Rhythmic stabilization and proprioceptive training drills with physical therapist

#### STRENGTHENING / THERABAND

Days per week: 7

Times per day: 1

External Rotation

Internal Rotation

Standing Forward Punch

Shoulder Shrug

Dynamic hug

“W”s

Call 617-726-7500 to reach your doctor; 617-643-9999 to reach MGH Sports Physical Therapy.



## Rehabilitation after Arthroscopic Labrum Repair of the Shoulder (SLAP)

### Phase Four: 12 to 16 weeks after surgery

#### Goals:

1. Gradual initiation of functional activities
2. Maintain full range of motion
3. Continue progressive strengthening

### Exercise Program

#### STRETCHING / RANGE OF MOTION

Times per day: 1

Days per week: 5-7

Pendulum exercises

Standing External Rotation / Doorway

Wall slide Stretch

Hands-behind-head stretch

Behind the back internal rotation

Supine Cross-Chest Stretch

Sidelying internal rotation (sleeper stretch)

External rotation at 90° Abduction stretch

#### STRENGTHENING / THERABAND

Times per day: 1 Days per week: 3

Continue exercises from phase 3

Optional exercises for overhead sports:

External rotation at 90°

Internal rotation at 90°

Standing 'T's

Diagonal up

Diagonal down

#### STRENGTHENING / DYNAMIC

Times per day: 1 Days per week: 3

Continue exercises from phase 3

Prone external rotation at 90° abduction "U's

Biceps curls

Resisted forearm supination-pronation

Resisted wrist flexion-extension

PNF manual resistance with physical therapist

Push-ups

#### PLYOMETRIC PROGRAM

Times per day and days per week: per physical therapist

'Rebounder' throws with arm at side

Wall dribbles overhead

#### WEIGHT TRAINING

See weight training precautions section

Call 617-726-7500 to reach your doctor; 617-643-9999 to reach MGH Sports Physical Therapy.



## **Guidelines and Precautions for Returning to Weight Training After Arthroscopic Labrum Repair**

You should not return to training using heavy weights or on weight machines until your doctor determines that it is safe.

In general, it is usually safe to return to heavier weight training at three months following labrum repair.

Before embarking on a weight-training program, you should have full range of shoulder motion and normal strength in the rotator cuff and scapular muscles. The doctor or a physical therapist will test your motion and strength before you start weight training.

When starting your weight-training program, you can start with 3 sets of 15-20 repetitions. Training with high repetition sets ensures that the weights that you are using are not too heavy.

NEVER perform any weight training exercise to the point of muscle failure. “Muscle failure” occurs when, in performing a weight training exercise, the muscle is no longer able to provide the energy necessary to contract and move the joint(s) involved in the particular exercise. Joint, muscle and tendon injuries are more likely to occur when muscle failure occurs.

The following weight training exercises should be avoided after Bankart repair for shoulder instability and superior labrum repairs:

1. Pull downs behind-the-neck (wide-grip)
2. Behind-the-neck shoulder press
3. Wide-grip bench press
4. Standing lateral deltoid raises
5. Triceps press overhead

The following exercises require special cautions:

1. Pull downs should only be done in front of the head, to the chest, with a medium (not wide) grip.
2. Shoulder press overhead should be done carefully, avoiding heavy weights. If doing shoulder presses, always start with the hand in front of the shoulder and end overhead where you can still see your hand. For persons using barbells, this is the “military press”.
3. If bench pressing, your grip should be no wider than the width of your shoulders. Avoid any exercises using grips wider or narrower than shoulder width.
4. Lateral deltoid raises should be avoided because of the impinging and wearing effect on the rotator cuff. Forward raises in the “thumb-up” position are usually safer and can be done with reasonable weights. Lateral raises from the prone or bent over position can be done as a substitute for standing lateral deltoid raises.
5. When doing incline bench press with barbells, there is a danger of shoulder dislocation if the lifter loses control of the bar when returning the barbell to the rack of the incline bench. Always have a spotter for removing and replacing the barbell in this exercise.
6. If you are doing any type of “chest-fly”, keep in mind the following precautions.

Do not do any chest-fly exercise with straight elbows. Always allow the elbows to bend and never lower your hands (holding dumbbells) below the level of your chest.

7. If you are using a “Pec-Deck” machine, never let the weight stretch the arms so that your elbows pass behind your chin. You can set the arms on this machine a few clicks forward to adjust the maximum motion allowed.
8. If you are performing “dips” using a set of parallel bars, never lower yourself below the point where the elbows reach a 90-degree angle.
9. For triceps exercises, triceps pushdowns on a pulley system are safe as well as bent-over triceps extensions.
10. When doing the upright-rowing exercise, keep your grip at least 12 inches apart. When pulling the bar upward toward the chin, do not raise the bar higher than the point at which the elbow reaches shoulder level.

#### Exercises Usually Problem-Free

1. Biceps Curls
2. Cable and bent-over rowing
3. Shoulder shrugs

If your goal is returning to high-level weight training or weight lifting, it will take 3 to 6 months of cautious, gradual progression to return to top form. In general, avoid increasing the amount of weight lifted by more than 10-15% (at a time) of your present working weight every 10-14 days.

Remember: Weight training is beneficial to improve muscular strength and protect the joints from injury. If done improperly by using too much weight and/or improper technique, weight training can cause serious injury.

## **Rehabilitation after Arthroscopic Labrum Repair of the Shoulder (SLAP)**

### **Phase Five: 16 to 20 weeks after surgery**

#### **Goals:**

1. Progression of functional activities
2. Maintain full range of motion
3. Continue progressive strengthening

#### **Exercise Program**

#### **STRETCHING / RANGE OF MOTION**

Days per week: 5-7 Times per day: 1

Continue all exercises from phase 4

#### **STRENGTHENING / THERABAND**

Days per week: 3 Times per day: 1

Continue from phase 4

#### **STRENGTHENING / DYNAMIC**

Days per week: 3 Times per day: 1

Continue from phase 4

#### **PLYOMETRIC PROGRAM**

Days per week and times per day per physical therapist

'Rebounder' throws with arm at side  
Wall dribbles overhead  
Rebounder throwing/weighted ball  
Deceleration drills with weighted ball  
Wall dribbles at 90°  
Wall dribble circles

#### **WEIGHT TRAINING**

See weight training precautions section

#### **INTERVAL SPORT PROGRAMS**

See individual programs for golf, tennis, swimming and throwing.

Call **617-726-7500** to reach your doctor; **617-643-9999** to reach MGH Sports Physical Therapy.

### Shoulder Exercises for SLAP Rehabilitation Protocol

The exercises illustrated and described in this document should be performed only after instruction by your physical therapist or doctor.

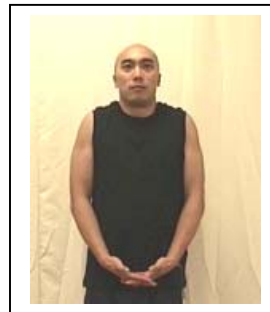
#### Pendulum exercise

Bend over at the waist and let the arm hang down. Using your body to initiate movement, swing the arm gently forward and backward and in a circular motion.



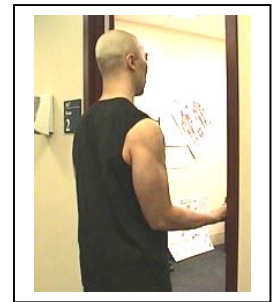
#### Shoulder shrug

Shrug shoulders upward as illustrated.



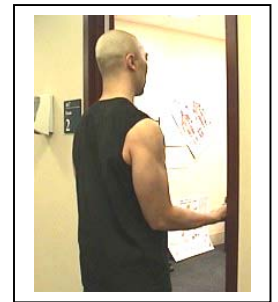
#### Shoulder blade pinches

Pinch shoulder blades backward and together, as illustrated.



#### Isometric internal and external rotation

Stand facing a doorjamb or the corner of a wall. Keep the elbow tight against your side and hold the forearm at a right angle to the arm. For internal rotation, place the palm against the wall with the thumb facing up. For external rotation, place the back of the hand against the wall with the thumb facing up. Pull or push against the wall and hold for 5 seconds



#### Ball squeeze exercises

Holding a rubber ball or tennis ball, squeeze the ball and hold for 5 seconds



#### Supine passive arm elevation

Lie on your back. Hold the affected arm at the wrist with the opposite hand. Using the strength of the opposite arm, lift the affected arm upward, as if to bring the arm overhead, slowly lower the arm back to the bed.



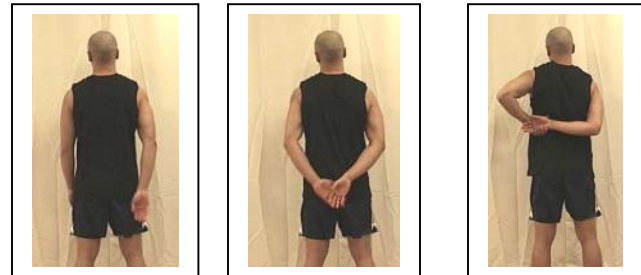
### Supine external rotation

Lie on your back. Keep the elbow of the affected arm against your side with the elbow bent at 90 degrees. Using a cane or long stick in the opposite hand, push against the hand of the affected arm so that the affected arm rotates outward. Hold 10 seconds, relax and repeat.



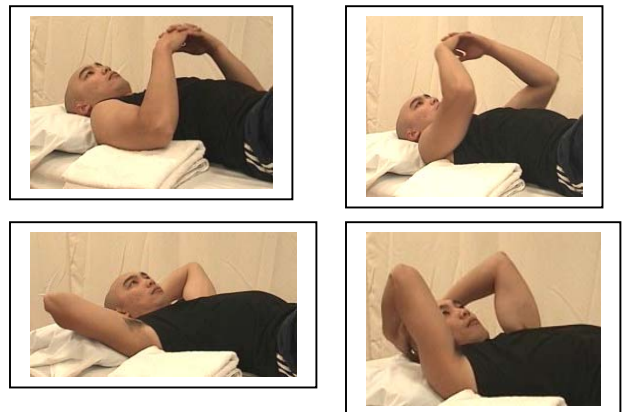
### Behind-the-back internal rotation

Sitting in a chair or standing, place the hand of the operated arm behind your back at the waistline. Use your opposite hand, as illustrated, to help the other hand higher toward the shoulder blade. Hold 10 seconds, relax and repeat.



### Hand-behind-the-head stretch

Lie on your back. Clasp your hands and place your hands behind your head with the elbows facing forward. Slowly lower the elbows to the side to stretch the shoulder outward. Hold for 10 seconds, and then return to the starting position.



### Standing external rotation

Stand in a doorway facing the doorframe or near the edge of a wall. With your hand against the wall or doorframe, keep the affected arm firmly against your side, and the elbow at a right (90 degree) angle. By moving your feet, rotate your body away from the door or wall to produce outward rotation at the shoulder.



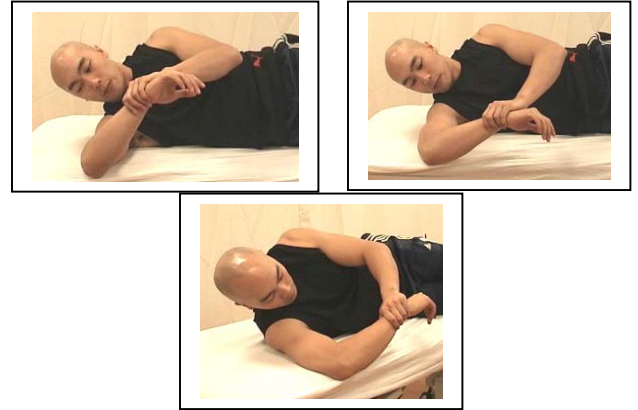
### Supine cross-chest stretch

Lying on your back, hold the elbow of the operated arm with the opposite hand. Gently stretch the elbow toward the opposite shoulder. Hold for 10 seconds.



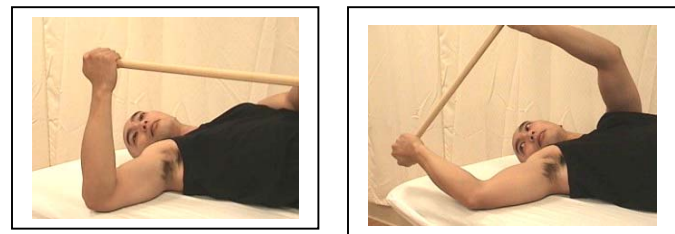
### Sidelying internal rotation stretch

Lie on your side with the arm positioned so that the arm is at a right angle to the body and the elbow bent at a 90° angle. Keeping the elbow at a right angle, rotate the arm forward as if to touch the thumb to the table. Apply a gentle stretch with the opposite arm. Hold 10 to 15 seconds.



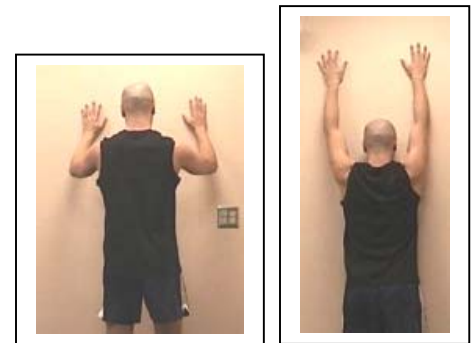
### External rotation at 90° abduction stretch

Lie on your back. Support the upper arm, if needed, with towels or a small pillow. Keep arm at 90 degrees to the body and the elbow bent at 90 degrees. Using a stick and the opposite arm, stretch as if to bring the thumb to the corner of the table adjacent to your ear. Hold for 10 seconds, and then return to the starting position



### Wall slide stretch

Stand facing a wall; place the hands of both arms on the wall. Slide the hands and arms upward. As you are able to stretch the hand and arm higher, you should move your body closer to the wall. Hold 10 seconds, lower the arm by pressing the hand into the wall and letting it slide slowly down.



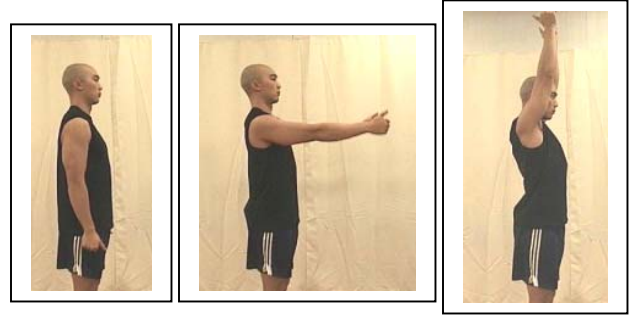
### Seated/Standing Forward Elevation (Overhead Elbow Lift)

During this phase, you can stand or sit in a chair. If it is easier, begin lying on your back until you achieve maximal motion, then use the standing or seated position. Assume an upright position with erect posture, looking straight ahead. Place your hands on either thigh with the operated thumb facing up and your elbow straight. In the beginning, this stretch is not performed solely with the operated arm, but uses the uninjured hand for assistance going up and coming down. As you become stronger, you can raise and lower your arm without assistance. The operated arm should be lifted as high as possible, or to your end-point of pain. Try to raise the arm by hinging at the shoulder as opposed to raising the arm with the shoulder blade.



### Standing forward flexion

Stand facing a mirror with the hands rotated so that the thumbs face forward. Raise the arm upward keeping the elbow straight. Try to raise the arm by hinging at the shoulder as opposed to raising the arm with the shoulder blade. Do 10 repetitions to 90 degrees. If you can do this without hiking the shoulder blade, do 10 repetitions fully overhead.



### Prone rowing

The starting position for this exercise is to bend over at the waist so that the affected arm is hanging freely straight down. Alternatively, lie face down on your bed with the operated arm hanging freely off of the side. While keeping the shoulder blade 'set', raise the arm up toward the ceiling while bending at the elbow. The elbow should be drawn along the side of the body until the hands touch the lower ribs. Always return slowly to the start position.



### Prone horizontal abduction ('T's')

The starting position for this exercise is to bend over at the waist so that the affected arm is hanging freely straight down. Alternatively, lie face down on your bed with the operated arm hanging freely off of the side. Rotate your hand so that the thumb faces forward. While keeping the shoulder blade 'set' and keeping the elbows straight, slowly raise your arm away from your body to shoulder height, through a pain-free range of motion (so that your hand now has the thumb facing forward, and aligned with your cheek). Hold that position for 1 to 2 seconds and slowly lower. Limit the height that you raise the arm to 90 degrees, or in other words, horizontal to the floor.



### Prone horizontal abduction with external rotation

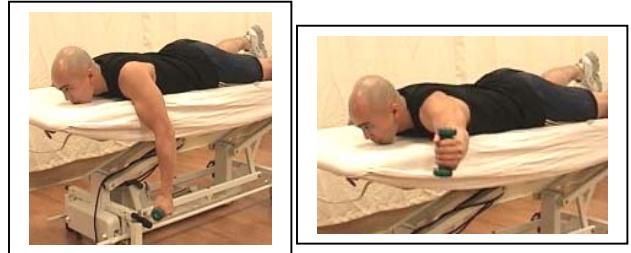
The starting position for this exercise is to bend over at the waist so that the affected arm is hanging freely straight down. Alternatively, lie face down on your bed with the operated arm hanging freely off of the side. Rotate your hand so that the thumb faces outward. While keeping the shoulder blade 'set' and keeping the elbows straight, slowly raise your arm away from your body to shoulder height, through a pain-free range of motion (so that your hand now has the thumb facing forward, and aligned with your cheek). Hold that position for 1 to 2 seconds and slowly lower. Limit the height that you raise the arm to 90 degrees, or in other words, horizontal to the floor.



### Prone scaption ('Y's)

The starting position for this exercise is to bend over at the waist so that the affected arm is hanging freely straight down.

Alternatively, lie face down on your bed with the operated arm hanging freely off of the side. Keep the shoulder blade 'set' and keep the elbows straight. Slowly raise the arm away from your body and slightly forward through a pain-free range of motion (so that your hand now has the thumb facing up, and is aligned with your forehead). Hold that position for 1 to 2 seconds and slowly lower. Limit the height that you raise the arm to 90 degrees, or in other words, horizontal to the floor.



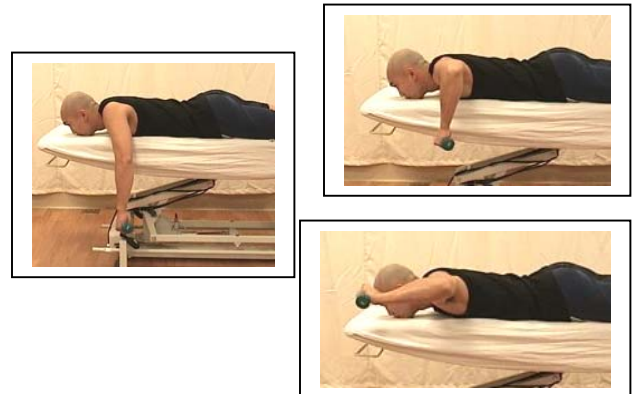
### Prone extension

The starting position for this exercise is to bend over at the waist so that the affected arm is hanging freely straight down. Alternatively, lie face down on your bed with the operated arm hanging freely off of the side. While keeping the shoulder blade 'set' and keeping the elbow straight, raise the arm backward toward your hip with the thumb pointing outward. Do not lift your hand past the level of your hip.



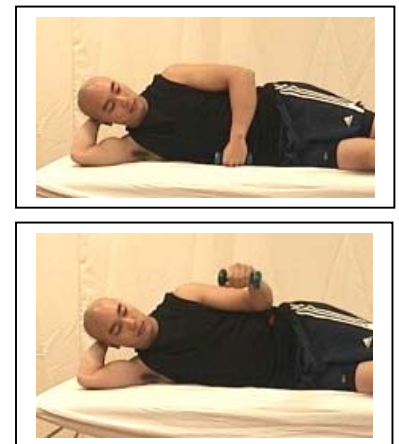
### Prone external rotation at 90° Abduction

Lie face down on a table with your arm hanging over the side of the table. Raise the arm to shoulder height at a 90° angle to the body. While holding the arm in this position, rotate the hand upward, until the hand is even with the elbow. Hold one second and slowly let the hand rotate to the starting position and repeat.



### Sidelying external rotation

Lying on the non-operated side, bend your elbow to a 90-degree angle and keep the operated arm firmly against your side with your hand resting on your abdomen. By rotation at the shoulder, raise your hand upward, toward the ceiling through a comfortable range of motion. Hold this position for 1 to 2 seconds, and then slowly lower the hand.





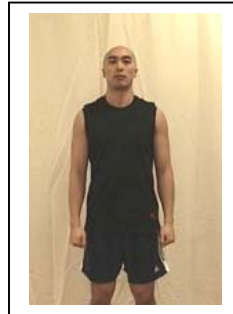
### Standing forward flexion ('full-can') exercise

Stand facing a mirror with the hands rotated so that the thumbs face forward. While keeping the shoulder blade 'set' and keeping the elbows straight, raise the arms forward and upward to shoulder level with a slight outward angle (30°). Pause for one second and slowly lower and repeat.



### Lateral Raises

Stand with the arm at your side with the elbow straight and the hands rotated so that the thumbs face forward. Raise the arm straight out to the side, palm down, until the hands reach shoulder level. Do not raise the hands higher than the shoulder. Pause and slowly lower the arm.

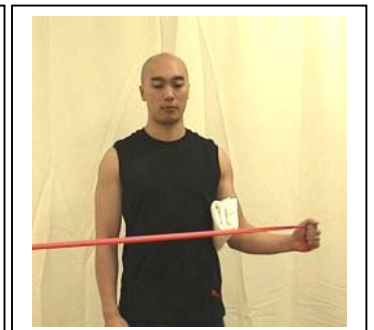


### Theraband Strengthening

These resistance exercises should be done very slowly in both directions. We want to strengthen you throughout the full range of motion and it is very important that these exercises be done very slowly, not only when you complete the exercise (concentric), but also as you come back to the start position (eccentric). The slower the motion, the more maximal the contraction throughout a full range of motion.

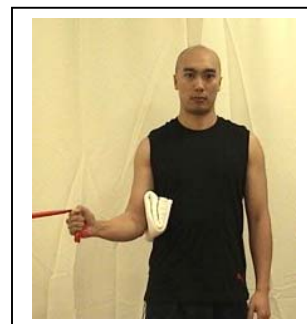
### External Rotation

Attach the theraband at waist level in a doorjamb or other. While standing sideways to the door and looking straight ahead, grasp one end of the band and pull the band all the way through until it is taut. Feet are shoulder width apart and the knees are slightly flexed. The elbow is placed next to the side with the hand as close to your chest as possible (think of this elbow as being a hinge on a gate). Taking the cord in the hand, move the hand away from the body as far as it feels comfortable. Return to the start position.



### Internal Rotation

Attach the Theraband at waist level in a doorjamb or other. While standing sideways to the door and looking straight ahead, grasp one end of the handle and pull the cord all the way through until it is taut. Feet are shoulder width apart and the knees are slightly flexed. The elbow is placed next to the side and is flexed at 90 degrees (think of this elbow as being a hinge on a gate). Taking the cord in the hand, move the hand toward the chest as far as it feels comfortable. Return to the start position.



### Shoulder Shrug

Stand on the theraband with your feet at shoulder width apart and look straight ahead. Next, straighten up, keeping the knees slightly flexed, with your arms straight down at the sides (palms in). Slowly raise the shoulders in a shrug (toward the ears), then rotate the shoulders backward in a circular motion, and finally down to the original position. This movement is completed while keeping constant tension on the cord.



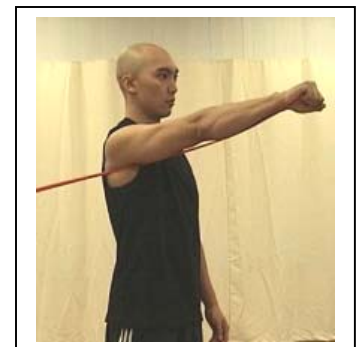
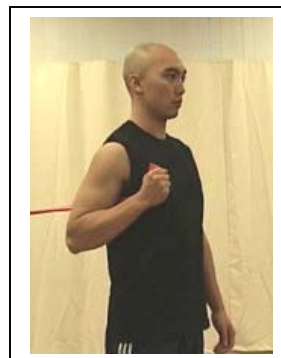
### Seated / Standing Row

Attach the theraband in a doorjamb or other. Sit or stand facing the door. Use a wide flat-footed stance and keep your back straight. Begin with the arms slightly flexed, hands together at waist level in front of your body, thumbs pointing upward, and with the cord taut. You are producing a rowing motion. Pull the cord all the way toward the chest. While pulling the cord, the elbows should be drawn along the side of the body until the hands touch the lower ribs. Always return slowly to the start position.



### Standing Forward Punch

Attach the theraband at waist level in the doorjamb. Facing away from the door, stand in a boxing position with one leg ahead of the other (stride position). Do not bend at the waist and remain in an upright position. If the right shoulder is the injured extremity, you will want to grasp the handle in the right hand and step out until the cord is taut. If you use the right hand, the left foot should be forward in the stride position. Begin with your right arm at waist level and bend the elbow at a 90 degree angle, with the elbow remaining near your side. Slowly punch forward while slightly raising the right arm in a forward, upward punching motion. The hand should reach approximately neck level with the right arm almost straight.



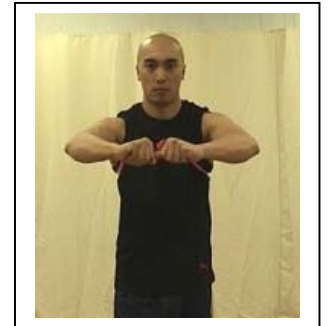
### Biceps Curls

Place your feet on the cord, shoulder width apart, knees slightly bent. Keeping your elbows close to the sides of your body, slowly bend the arm at the elbow and curl towards the shoulder.



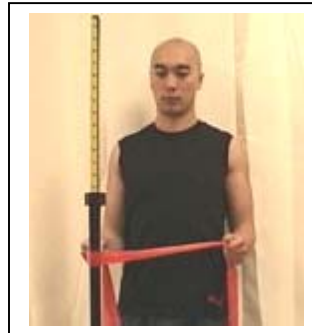
### Dynamic Hug

With the tubing attach behind you at shoulder height, grip both ends of the tubing in your hands with the tubing on the outside of your shoulders. Pull the band forward and slightly downward in a 'hugging' motion, or as if you were wrapping both arm around a small tree. Pause and return slowly to the starting position.



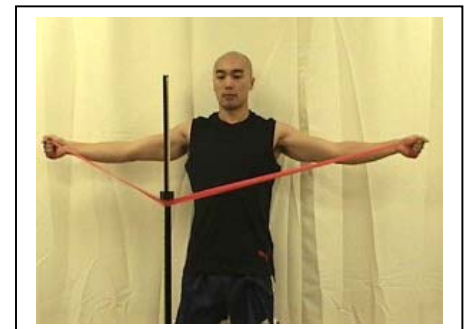
### 'W's

With the tubing attached in front of you, stand with the tubing in both hands with the elbows bent at 90° and fixed at your side. Pull the band outward, keeping the elbow at your side. The arms rotate outward making the shape of a 'W'.



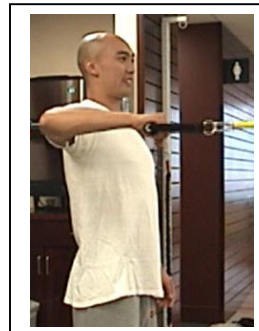
### Standing 'T's.

Stand with the theraband attached in front of you. Stand with the arm flexed forward at shoulder height with the elbow straight. While keeping the elbow straight, pull the arm toward the rear until the arm is by your side.



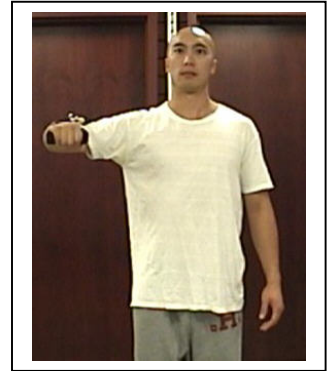
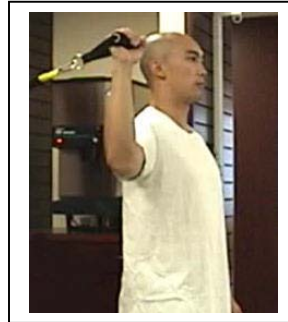
### Theraband external rotation at 90°.

Stand with the theraband attached in front of you. Keeping the arm elevated to 90 degrees and the elbow at a 90-degree angle, rotate the hand and arm slowly backward and then return slowly to the start position.



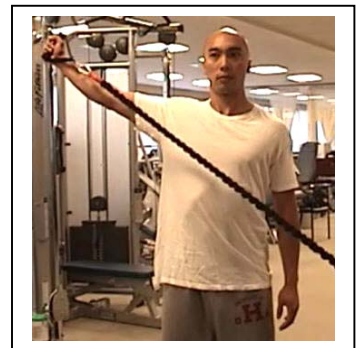
Theraband internal rotation at 90°.

Stand with the theraband attached behind you. Keeping the arm elevated to 90 degrees and the elbow at a 90-degree angle, rotate the hand and arm slowly forward and then return slowly to the start position.



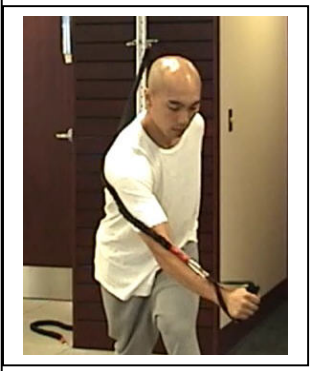
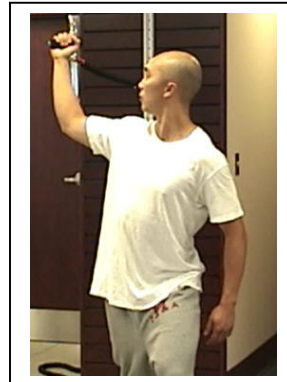
Theraband diagonal-up

Stand with the theraband attached on your left side for your right hand. Start with your right hand on the left hip with the thumb facing the hip. Start by pulling the band so that your hand travels up and behind your head.



Theraband diagonal-down

Stand with the theraband attached behind you at shoulder level. Start with your arm in throwing position. Pull the band down and across your body so that your thumb faces the opposite hip.



## Rehabilitation Guidelines after Arthroscopic Superior Labrum (SLAP) Repair of the Shoulder

Post-op phase	Sling	Range of Motion	Therapeutic Exercise		Precautions
<b>Phase 1</b> 0-4 weeks after surgery  <u>Goals:</u>  *Allow healing of repaired labrum.  *Initiate early protected and restricted range of motion.  *Minimize muscular atrophy.  *Decrease pain/inflammation.	Per MD instructions.  Pendulum exercises several times a day	<b>Weeks 0-2</b> *Flexion as tolerated *ER/IR with arm in scapular plane at 40° abduction: *ER to 15 ° *IR to 45°  <b>Weeks 3-4</b> *Flexion as tolerated *Abduction to 80° *ER/IR with arm in scapular plane at 40° abduction: *ER: 30 ° *IR : 60 °	Pendulum exercise  Active-assisted supine FF as tolerated.  ERN as tolerated.  IR behind back.  Scapular retraction  **NO active ER or Extension or Abduction	Isometric exercise at 0° of abduction  Ball squeezes  Rhythmic stabilization (RS)	Avoid ER in abduction.  Caution to avoid excessive shoulder extension.
<b>Phase 2</b> 5 <sup>th</sup> to 7 <sup>th</sup> weeks after surgery  <u>Goals:</u>  *Gradual increase in ROM  *Improve strength  *Decrease pain/inflammation	D/C	*Flexion as tolerated  *ER at 45° abduction: 50°  *IR at 45° abduction: 60°  *At 6 weeks begin light and gradual ER at 90° abduction – progress to 45° ER	ERN  IR behind back  Supine FF as tolerated.	Continue phase 1 exercises: *Active-assisted progressing to active forward flexion with scapulohumeral rhythm Sidelying ER Sidelying scaption Prone row Prone extension Prone T Standing scaption Theraband ER/IR Proprioception drills	Gentle mid-range ER in POS, gradually progress to coronal plane.  Cautiously improve ERN.
<b>Phase 3</b> 8-12 weeks after surgery  <u>Goals:</u>  *Gradually restore full range of motion  *Increase strength *Improve neuromuscular control  *Enhance proprioception and kinesthesia	D/C	Week 7-9:  *Gradually progress ROM:  *Flexion to 180 °  *ER at 90° abduction: 90°  *IR at 90° abduction: progress to full	ER @ scapular plane  Wall slide  IR behind back  Horizontal adduction  Sidelying IR @ 90°  Hands behind head starts 9 <sup>th</sup> week postop  Overhead pulley	<u>Theraband exercises:</u> *ER, IR, forward, punch, shrug, dynamic hug, 'W's. *Biceps curl starts week 9 *Seated row starts week 11 <u>Dynamic exercises:</u> *Continue phase 2 exercises *PRE 1-3 lb. as tolerated *Prone Y *Continue RS *Continue proprioception drills *Scapulohumeral rhythm exercises	Continue same as above

Post-op Phase	Therapeutic Exercises		Return to Sports	Precautions
<p><b>Phase 4</b> 12- 16 weeks after surgery</p> <p><u>Goals:</u></p> <ul style="list-style-type: none"> <li>* Full ROM</li> <li>*Improve: strength, power and endurance</li> <li>*Improve neuromuscular control</li> <li>*Improve dynamic stability</li> <li>*Improve scapular muscular strength</li> </ul>	<p>Gradually stretch to full ROM</p> <p>Continue previous stretches</p>	<ul style="list-style-type: none"> <li>*Continue phase 3 exercises</li> <li>*Optional exercises: -Theraband: add 'T's, diagonal up and down -Add Prone'U's</li> <li>*Weight training can begin.</li> <li>*Plyometric exercises:  Rebounder throws arm at side</li> <li>Wall dribbles overhead</li> </ul>	<p>Not yet</p>	<p>See weight training precautions.</p> <p>Continue to avoid excessive or forceful extension and ER</p>
<p><b>Phase 5</b> 16-20 weeks after surgery</p> <p><u>Goals:</u></p> <p>Progressively increase activities to prepare patient for unrestricted functional return</p>	<p>Full ROM</p>	<ul style="list-style-type: none"> <li>*Continue above</li> <li>*Plyometric exercise:  *Add rebounder throws with weighted ball,</li> <li>*Decelerations *wall dribbles at 90°, *wall dribble circles</li> </ul>	<p>Interval sports programs can begin per MD</p>	<p>Weight training precautions.</p> <p>Shoulder brace sometimes for collision sports.</p>