

#### ARTHROSCOPIC SHOULDER SURGERY

#### **Preoperative instructions**

Schedule surgery with the secretary in Dr.Gill's 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) sometimes necessary depending upon age and medical history)
- \* Electrocardiogram (EKG) (sometimes necessary depending upon age and medical history)

# 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 Dr. Gill's office for your time to report to the Surgical Unit
- \* <u>NOTHING TO EAT OR DRINK AFTER MIDNIGHT</u>. 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
- Please bring the sling, ice machine, and imaging studies that you may have obtained.



# ARTHROSCOPIC SHOULDER SURGERY POSTOPERATIVE INSTRUCTIONS

#### **GOALS:**

- 1. Control pain and swelling
- 2. Protect the surgical repair
- 3. Protect wound healing
- 4. Begin early shoulder motion

#### **ACTIVITIES:**

#### **Immediately After Surgery**

- 1. After surgery you will be taken to the recovery room in the Surgical Unit.
- 2. Apply cold packs to the operated shoulder to reduce pain and swelling.
- 3. Move your fingers, hand and elbow to increase circulation and prevent stiffness.
- 4. The novocaine in your shoulder wears off in about 6 hours. Use your pain medication as prescribed after that.
- 5. You will receive a prescription for pain medication for when you go home (it will make you constipated if you take it for a long time).
- 6. You can be discharged from the hospital as long as there is no problem with pain or nausea.

#### The Next Day After Surgery

- 1. The large dressing can be removed and a small bandage or Band-Aids applied.
- 2. Remove the sling several times a day to gently move the arm in a pendulum motion: lean forward and passively swing the arm.

# **At Home**

- 1. You can remove the bandages but leave the small pieces of tape (steristrips) in place.
- 2. You may shower and get the incision wet. 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. Do not submerge the surgical wounds in a bathtub or swimming pool.
- 3. Apply cold to the shoulder for 20 minutes at a time as needed to reduce pain and swelling.



- 4. Remove the sling several times a day: move the elbow wrist and hand. Lean over and do pendulum exercises for 3 to 5 minutes every 1 to 2 hours.
- 5. **DO NOT** lift your arm at the shoulder using your muscles. Unless otherwise instructed by your doctor, you can use your opposite arm to perform passive motion on the surgical side (see rehabilitation instructions).
- 6. Because of the need for your comfort and the protection of the surgical repair, a sling is usually necessary for 1 to 2 weeks, unless otherwise instructed by the doctor.

# .OFFICE VISIT:

Please arrange to see Dr. Gill in the office 7-10 days after surgery.



# Shoulder Arthroscopic Capsular Release Rehabilitation

Phase One: 0 to 2 weeks after surgery

#### **Goals:**

- 1. Prevent shoulder stiffness
- 2. Regain range of motion
- 3. Ensure wound healing

#### **Activities:**

#### 1. Sling

Use your sling as needed for comfort. Remove the sling and move the arm frequently by doing pendulum exercises.

# 2. <u>Use of the operated arm</u>

You may use your hand on the operated arm in front of your body but <u>**DO NOT**</u> raise your arm or elbow away from your body. It is all right for you to flex your arm at the elbow. 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.

### 4. Physical Therapy

You should make appointments to begin physical therapy the day after your arthroscopic capsular release. For the first three weeks after surgery, you should see the physical therapist at least three to five times a week for passive stretching to help maximize your efforts to regain full range of motion.

#### **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:

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Pendulum exercises	1-2 sets	20- 30 reps
Supine External Rotation	1-2 sets	10-15 reps
Supine passive arm elevation	1-2 sets	5-10 reps
Behind the back internal rotation	1-2 sets	5-10 reps



#### Exercises

All stretching exercises should be done slowly to maximize muscle and soft connective tissue involvement. When stretching, your goal is to reach the maximum range of motion for you. There is a reason for multiple sets and repetitions. This reason stems from "warming up" the shoulder so it can actually stretch further in the last few repetitions that you will do. The first few repetitions prepare the stiffened or swollen shoulder for initial movement.

During active stretching and upon reaching your "endpoint" of pain or movement, push the operated arm with the uninjured hand another 5—10 degrees for additional movement. This final movement is labeled "terminal stretch". Maximum motion for each person remains the goal and terminal stretching will assist in achieving that goal.

Since there is more than one repetition per set, allow the first one or two repetitions to be warm—up reps, with very little pain. Gradually work into more and more range of motion.

It is also important to allow pain to be your guide. Move the arm to an "endpoint" (that endpoint is dictated by the amount of pain). Your goal is to increase the endpoint as often as possible until you have reached the full range of motion. As far as pain, you want to avoid excruciating pain, but "discomfort" is tolerated as long as the pain does not remain for a prolonged period of time. A basic rule to follow when stretching is, if the pain does not linger, you did not stretch too far.

#### 1. 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.

#### 2. Shoulder shrug

Shrug shoulders upward as illustrated.

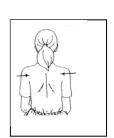
#### 3. Shoulder blade pinches

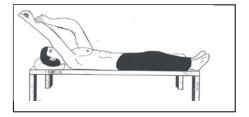
Pinch shoulder blades backward and together, as illustrated.

#### 4. Supine passive arm elevation

Lie on your back. Hold the affected arm at the elbow 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.









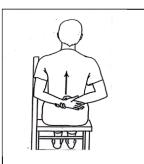
# 5. Supine external rotation

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.



# 6. 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.



#### **Office Visit**

Please arrange to see Dr. Gill approximately 4 weeks following your first post-operative visit (6 weeks after surgery).



# Rehabilitation after Shoulder Arthroscopy

Phase two: 3 to 6 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 the doctor instructs you to continue using it (use it for comfort only).

# 2. Use of the operated arm

You should continue to avoid lifting your arm away from your body. You can lift your arm forward in front of your body but **not** to the side. You may raise your arm to the side, if you use the good arm to assist the operated arm.

# 3. Bathing and showering

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

#### **Exercise Program**

#### **ICE**

Days per week: 7

Times per day: 4-5 As necessary 15-20 minutes

#### STRETCHING / ACTIVE MOTION

Days per week: 7 Times per day: 3-4

#### Program:

Pendulum exercises	1-2 sets	20-30 reps
Supine External Rotation	1 set	10-15 reps
Standing External Rotation	1 set	10-15 reps
Supine passive arm elevation	1 set	5-10 reps
Seated-Standing Arm Elevation	1 set	5-10 reps
Behind the back internal rotation	1-2 sets	5-10 reps
Supine external Rotation with Abduction	1 set	5-10 reps
Supine Cross Chest Stretch	1 set	5-10 reps
Side-lying External Rotation	1 set	10-20 reps
Prone Horizontal Arm Raises	1 set	10-20 reps



#### **Exercises**

#### 1. Supine external rotation with abduction

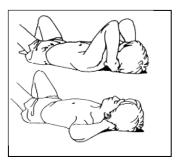
Lie on your back. Place your hands behind your head as shown in illustration. Slowly lower the elbows to stretch the shoulder toward the second position shown in illustration. Hold for 10 seconds, then return to the starting position.

# 2. Standing Forward Elevation (Overhead Elbow Lift)

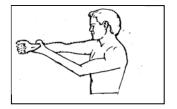
This exercise allows the patient to begin arm elevation actively, against gravity, with the assistance of the unaffected arm. Over several days or weeks, you will need less and less assistance with the unaffected arm, until you can raise the arm up overhead under its own strength. The starting position for this exercise is standing and looking straight ahead. The use of a mirror to help you see the exercise is helpful. Start with your hands in front of either the thighs with the operated thumb facing forward. Again, in the beginning of phase 2, this exercise is not performed solely with the operated arm, but uses the unaffected hand for assistance going up and coming down. Keep your elbow straight and extended. The operated arm is lifted forward as high as possible, or to your endpoint of pain. Try to allow the arm to rotate at the shoulder by not allowing the shoulder blade to elevate or 'hike'. Pause and hold at the top overhead position for 3 to 5 seconds. Slowly lower the arm to the starting position and slowly repeat as shown in the illustration. As a precaution to avoid placing excessive tension on the surgical repair, avoid pain while doing this exercise, especially when lowering the arm. Use more assistance from the unaffected arm to help the affected arm through the painful arcs of motion.

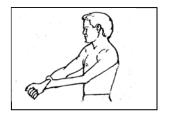
#### 2. Supine cross-chest stretch

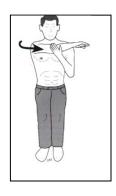
Lying on your back, hold the elbow of the operated arm with the opposite hand. Gently stretch the elbow toward the opposite shoulder. Hold for 10 seconds.













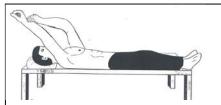
#### 3. Standing external rotation

Stand with the operated shoulder toward a door as illustrated. While keeping the operated arm firmly against your side and the elbow at a right (90 degree) angle, rotate your body away from the door to produce outward rotation at the shoulder.

# 4. Supine passive arm elevation

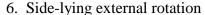
Continue this exercise from phase two, stretching the arm overhead. Hold for 10 seconds.



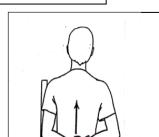


#### 5. Behind-the-back internal rotation

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



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, then slowly lower the hand.

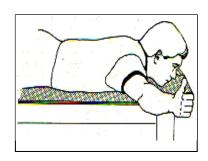






#### 7. Prone or bent-over horizontal arm raise

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 away from you. Slowly raise your arm away from your body with the elbow straight, through a pain-free range of motion (so that your hand now has the thumb facing up, 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.



**Office visit:** Please arrange an appointment to see Dr. Gill in 6 weeks (12 weeks from surgery).



# **Rehabilitation after Shoulder Arthroscopy**

Phase Three: 6 to 12 weeks after surgery

#### Goals:

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

#### **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 disrupt the healing of your surgical repair.

# **Exercise Program**

#### STRETCHING / ACTIVE MOTION

Days per week: 7 Times per day: 1-2

Pendulum exercises	1-2 sets	20- 30 reps
Standing External Rotation / Doorway	1 set	5-10 reps
Wall Climb Stretch	1 set	5-10 reps
Corner Stretch	1 set	5-10 reps
Standing Forward Flexion	2 sets	10-20 reps
Behind the back internal rotation	1-2 sets	5-10 reps
Supine external Rotation with Abduction	1 set	5-10 reps
Supine Cross Chest Stretch	1 set	5-10 reps
Side-lying External Rotation / 1 lb.	1 set	10-20 reps
Prone Horizontal Arm Raises / 1 lb.	1 set	10-20 reps

# STRENGTHENING / THERABAND

External Rotation	1-2 sets	15-20 reps
Internal Rotation	1-2 sets	15-20 reps
Standing Forward Punch	1-2 sets	15-20 reps
Shoulder Shrug	1-2 sets	15-20 reps
Seated Row	1-2 sets	15-20 reps
Biceps curl	1-2 sets	15-20 reps



# 1. Standing external rotation

Stand with the operated shoulder toward a door as illustrated. While keeping the operated arm firmly against your side and the elbow at a right (90 degree) angle, rotate your body away from the door to produce outward rotation at the shoulder. Hold 10 seconds.



# 2. Corner stretch

Standing facing a corner, position the arms as illustrated with the elbows at shoulder level. Lean your body gently forward toward the corner until a stretch is felt. Hold 10 seconds, relax and repeat.



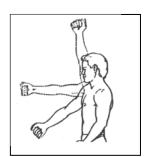
#### 3. Wall climb

Stand facing a wall; place the fingers of the affected arm on the wall. Using the fingers as "feet", climb the hand and arm 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.



#### 4. 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 ten repetitions fully overhead.



### 5. Side-lying external rotation

Continue this exercise from phase one using a one or two pound weight. 10 repetitions.

#### 6. Prone or bent-over horizontal arm raise

Continue this exercise from phase one using a one or two pound weight.



# **Theraband Strengthening**

These resistance exercises should be done very slowly in <u>both</u> directions. Your goal is to achieve a maximum amount of strengthening while listening to your endpoint of pain. Obviously, we want to strengthen you throughout the full range of motion. 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.

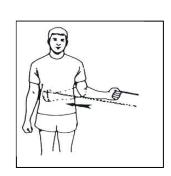
#### 1. External Rotation

Attach the theraband at waist level in a door jamb 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 injured elbow is placed next to the side with the injured hand as close to your chest as possible (think of this elbow as being a hinge on a gate). Taking the cord in the injured hand, move the hand away from the body as far as it feels comfortable (at least 90 degrees is our goal), or to where the endpoint of pain limits you. Return to the start position; if you would like, during future repetitions go a few more degrees to work more of a range of motion.



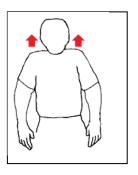
#### 2. Internal Rotation

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 injured 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 injured hand, move the hand toward the chest as far as it feels comfortable, or to where the endpoint of pain limits you. Return to the start position



#### 3. Shoulder Shrug

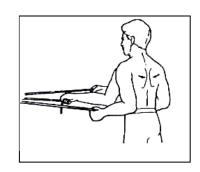
Stand on the theraband with your feet at should width apart and. Look straight ahead. Next, straighten up, keeping the knees slightly flexed, with your arms straight down at the sides (palms in). Slowly raise the shoulders in a shrug (toward the ears), then rotate the shoulders backward in a circular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





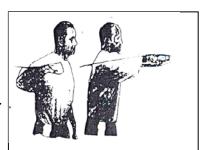
#### 4. Seated / Standing Row

Attach the theraband in a door jamb 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.



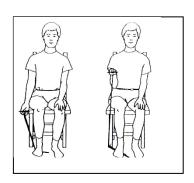
# 5. Standing Forward Punch

Attach the theraband at waist level in the door jamb. 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.



# 6. 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. Alternate arms while performing this exercise.



# **Office Visit**

Please arrange an appointment with Dr. Gill in 3 months (6 months post-surgery).



# Rehabilitation after Shoulder Arthoscopic Surgery No Repairs: Subacromial Decompression or Debridement Procedures

Post-op phase	Sling	Range of Motion	Stretching Exercises	Strengthening exercises	Precautions
Phase 1 0-2 weeks after surgery	Per MD instructions	Pendulum exercises. Supine FF as tolerated. ERN as tolerated. IR behind back	Ok with physical therapist ROM per phase 1	No	ROM as tolerated
Phase 2 2-6 weeks after surgery	D/C	Begin active- assisted and active ROM per phase 2	All planes	Antigravity elevation Scapulohumeral rhythm	Avoid exercises in coronal plane abduction
Phase 3 6-12 weeks after surgery	D/C	Gradually improve to full ROM all planes	All planes.	Theraband exercises Scapulohumeral Rhythm exercises PRE 1-3 lb.	Continue same as above