Shoulder Subacromial Decompression, Biceps Tenodesis

Rehabilitation Protocol

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SHOULDER SURGERY

The recovery process after Shoulder surgery is straight-forward and this document is designed to help you and your physical therapist to get the best outcome!

Please visit Dr. Huang's website for post-operative care and early motion exercises. This page has many resources for you including training videos on dressing removal, crutch instruction, brace instruction, and even range of motion exercises!

The website is: https://www.huangortho.com/shoulder-surgery-patients

General recommendations:

- Do not hesitate to contact Dr. Huang's team with any questions or concerns
- Less is more! Do not push too hard, rest is an important aspect to recovery
- Manual therapy is an important part of your recovery, make sure your therapist includes range of motion, soft tissue manipulation, and joint mobilizations throughout your recovery.
- Setbacks are normal, recovery is never a smooth and straight line. Try not to get frustrated if you hit a setback and aim to work through it with your therapist

AFTER SURGERY

1. Medications: we give you a variety of medications to try to make the recovery go smoothly. Remember that most of these medications are AS NEEDED. So, if you do not need them, do not use them.
    a. Pain medication (usually oxycodone or hyrdrocodone). This is the narcotic. It is to take the edge off of surgical pain. It will not eliminate the pain. These are addictive so please use sparingly.
    b. Stool softener (Colace). While taking the narcotic, please take a stool softener to counteract the constipation caused by the pain medication.
    c. Anti-nausea (ondansetron or phenergan). This is provided if you have nausea after surgery.
    d. Muscle relaxant (cyclobenzaprine or other). This is provided to help with muscle spasms that can occur after surgery. This can be taken with the pain medication or all by itself. Please be aware that it makes most patients sleepy.
    e. Blood thinner (aspirin or other). All surgical patients are at risk for blood clots. Based on your personal risk, we will prescribe one. Duration is based on the complexity of the surgery and the duration of risk.

2. Shoulder Sling: Prior to leaving the operating room a shoulder sling will be applied.
    a. The sling helps to keep the shoulder in relative position. It WILL NOT be rigid.
    b. For the first 24 hours, we recommend keeping it on at all times. After removing the dressing on the first day, you may remove the remove. The sling should be on when you are up and walking/standing. The sling should be on when you laying down and sleeping. See video on Dr. Huang's website (www.huangortho.com)
    c. When sitting or reclining, the sling is NOT necessary and may be removed. This includes removing it during bathroom activities and also when showering.
3. If you chose to have a N'Ice or GameReady machine, we will help you set this up ahead of time. Please give us advanced notice.
    a. For either machine, you can leave the cold compression on for 30-45 minutes before giving it a break. **Please note that the N'Ice or GameReady may not be reimbursed by your insurance company and that the patient may incur the cost of these devices.**
    b. Ice packs or frozen bag of peas can be a great way to provide cold therapy to the knee. We recommend keeping these on for 20 minutes at a time and then allowing the knee to warm back up for another 20 minutes. Always keep a wash cloth or other layer between the skin and the ice pack.

RETURN TO WORK

1. As far as returning to work, if you have a desk type job you can return to work when your pain medication requirements decrease. Typically, this is between 5 - 10 days after surgery.
2. Patients who have jobs where light duty is not permitted will be out of work for a minimum of 6 - 12 weeks. Please discuss this with us as soon as possible so we can help you get all the details right!

WHEN CAN I DRIVE A CAR?

REMEMBER, IT IS ILLEGAL TO TAKE PRESCRIPTION PAIN MEDICATIONS AND OPERATE A MOTOR VEHICLE!

1. First, you must not be taking any prescription pain medications.
2. Patients who have had surgery on the shoulder should not drive until they have good muscular control of the arm and feel that they can control the vehicle safely. This usually takes 1-6 weeks.

Subacromial Decompression, Biceps Tenodesis, Debridement Protocol

The intent of this protocol is to provide the therapist and patient with guidelines for the post-operative rehabilitation course after arthroscopic shoulder debridement, subacromial decompression, and possible biceps tenodesis. This protocol is based on a review of the best available scientific studies regarding shoulder rehabilitation. It is by no means intended to serve as a substitute for one's clinical decision making regarding the progression of a patient's post-operative course. It should serve as a guideline based on the individual's physical exam/findings, progress to date, and the absence of post-operative complications. If the therapist requires assistance in the progression of a post-operative patient they should consult with Dr. Huang. *Progression to the next phase based on Clinical Criteria and/or Time Frames as Appropriate.*

PHASE 1 (0-2 weeks post-operatively) - Protective Phase

Physical Therapy: Home exercises begin on Day 1. Formal PT starts within a week of surgery.

Rehabilitation Goals	• Primary focus is to restore ROM to within normal limits compared to contralateral upper extremity and elbow and shoulder joints. • Protection phase of postoperative shoulder. • Control pain and inflammatory response.
Precautions	• Patient immobilized in sling during protective phase. • **Biceps Tenodesis - AVOID resisted elbow flexion and supination for 4-6 weeks as noted in patients PT post-op referral (ie. no heavier than glass of water).** • Limited external rotation to 30 degrees when in conjunction with SLAP repair. • Assess for signs and symptoms for deep vein thrombosis and continue to monitor for signs of infection. • Avoid extreme forearm pronation/supination.
Range of Motion	• PROM as tolerated in shoulder flexion and abduction.
Manual Therapy	• Initiate joint mobilizations for glenohumeral and scapulothoracic joints.
Therapeutic exercises	• Ball squeezes • Pendulums (forward/backward, lateral, circles) • Active range of motion elbow and wrist in all directions • Scapular retractions - depression • Cervical range of motion all directions • Table slides

Cardiovascular activities	• Recumbent bicycle
Progression Criteria	• 2 weeks post surgery
Modalities	• Use modalities as needed for pain management and healing response • Cryotherapy to manage pain and swelling.

PHASE 2: Week 2-5

Physical Therapy: Continue with PT 1-2 times per week pending therapist discretion. Continue home exercise program.

Rehabilitation Goals	• Minimize shoulder pain and inflammatory response. • Achieve restoration of active-assisted ROM and gradual active ROM. • Promote return to activities of daily living, with the exception of prolonged overhead, repetitive or lifting activities.
Precautions	• Patient may or may not be in arm sling. • **Biceps Tenodesis - AVOID resisted elbow flexion and supination for 4-6 weeks as noted in patients PT post-op referral (ie. no heavier than glass of water).**
Range of Motion	• Active-assisted and active ROM as tolerated by patient.
Manual Therapy	• Continue joint mobilizations for glenohumeral and scapulothoracic joints. • Soft tissue massage over parascapular and pectoralis muscles. • Incision mobilization once healed well.
Therapeutic Exercises	• Wall walks/climbs • Wand FL/ABD/ER • Pulleys • Initiated gentle isometrics internal/external rotation, abduction, flexion and extension. These may be completed in a variety of angles within pain-free range. • Add any forearm strengthening related exercises. • Tubing may be used for resistance within pain-free range of motion. • Rows with tubing: low rows - stop at the plane of the body • Rows at 90 degrees flexion stop at scapular plane. • Prone row • Prone lat extension - avoid extension beyond plane of the body. • Begin AROM with supination/pronation without resistance • Initiate sleeper (Sidelying IR) stretch as tolerated

	As strength improves, progress to the following free weight exercises: ● Sidelying external rotation - avoid anterior translation of humeral head by limiting the degrees of shoulder external rotation and shoulder extension, as needed. ● Sidelying Internal rotation - elevate or support the lateral chest wall (pillow, bolster, wedge, etc.) to decrease the joint compression on the involved shoulder. ● Active shoulder flexion - pain limiting. ● Active shoulder ABD to 90 degrees - pain limiting. ● Arm Ergometer/Cycle for muscular endurance at 4 weeks.
Cardiovascular activities	● Treadmill walking. ● Recumbent or upright bicycle. ● No running and jumping to avoid distractive forces.
Progression Criteria	● Restore full PROM and AROM in all planes to within normal limits when compared to contralateral UE. ● Achieve phase 2 exercises without increased pain symptoms.
Modalities	● Use of heat and cryotherapy as needed. ● Electrical stimulation for healing response and pain management as needed.

PHASE 3: Begin after 6 weeks post-op or when patient has met progression criteria (6-12 weeks)

Physical Therapy: 1-2 times per week

Rehabilitation Goals	• Normalize strength of rotator cuff and parascapular muscles to 5/5 in all planes. • Normalize scapulo-humeral movement. • Return to all activities below chest level.
Precautions	• No swimming, throwing or sports
Manual Therapy	• Continue capsular stretching, joint mobilizations and ROM exercises. • Incision mobilizations as needed.
Therapeutic Exercises	• Begin free weight strengthening exercises. Emphasize eccentric control of rotator cuff and parascapular muscles • Active horizontal adduction exercises - begin in scapular plane • Add military press performed at an angle 140-160 degrees • Add push-ups. Avoid depth of push up below 90 degrees of elbow flexion. Emphasize scapular protraction to promote activation of serratus anterior. Begin with wall push ups, progress toward hands/knees, then floor with hands/feet as tolerated. • Initiated closed kinetic chain strengthening exercises. • Skill development. Begin with **low intensity** for the specific sport/activity. • For throwing athletes, initiate throwing motions without ball.
Cardiovascular activities	• Recumbent or upright bike, arm/cycle ergometer, treadmill or elliptical trainer.
Progression Criteria	• Muscle strength restored to 5/5 in all activities below 90 degrees shoulder flexion. • Completion of above listed activities without pain or difficulty.
Modalities	• As needed for pain relief and healing response.

PHASE 4: (Begin after criteria of Phase 3 was met, usually 12 + weeks post-op)

Rehabilitation Goals	• Clearance from MD for return to all activities and discharge from PT.
Precautions	• Progress overhead and sport specific activities as tolerated.
Therapeutic Exercises	• Continue focus on sport specific skill, inclusive of throwing and overhead activities. Slowly progress range of motion and velocity as tolerated by patient. • ** Return to Throwing Sports or Golf - Reference: "Interval Sport Programs: Guidelines for Baseball, Tennis, and Golf." by Michael M. Reinold, PT and Kevin E. Wilk, PT. • Emphasize eccentric phase of rotator cuff strengthening.
Cardiovascular activities	• Arm ergometer/cycle for upper body endurance. • Begin swimming progression starting with beast stroke, then backstroke, freestyle and lastly butterfly stroke as tolerated. Increase speed and intensity slowly. • May begin jogging/running.
Progression Criteria	• Discharge from rehabilitation when patient is able to return to all activities of daily living and sports/recreational activities without pain or limitations.