Tidewater Orthopaedics
Specialized Care You Can Trust

Total Shoulder Rehab Protocol

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Phase I – Immediate Post Surgical Phase (0-4 weeks):

Goals:

• Allow healing of soft tissue (especially the subscapularis repaired during the surgery)

• Maintain integrity of replaced joint

• Gradually increase passive range of motion (PROM) of shoulder; restore active range of motion (AROM) of elbow/wrist/hand

• Reduce pain and inflammation

• Reduce muscular inhibition

• Independent with activities of daily living (ADLs) with modifications while maintaining the integrity of the replaced joint.

Precautions:

• Sling should be worn continuously for 4 weeks

• While lying supine, a small pillow or towel roll should be placed behind the elbow to avoid shoulder hyperextension / anterior capsule stretch / subscapularis stretch. (When lying supine patient should be instructed to always be able to visualize their elbow. This ensures they are not extending their shoulder past neutral.) – This should be maintained for 6-8 weeks post-operative.

• Avoid shoulder AROM.

• No lifting of objects

• No excessive shoulder motion behind back, especially into internal rotation (IR)

• No excessive stretching or sudden movements (particularly external rotation (ER)) • No supporting of body weight by hand on involved side • Keep incision clean and dry (no soaking for 2 weeks)

• No driving for 3 weeks

Early Phase I :

• Passive forward flexion in supine to tolerance

• Gentle ER in scapular plane to available PROM (as prescribed by Dr. Payne) – usually around 30° (Attention: DO NOT produce undue stress on the anterior joint capsule, particularly with shoulder in extension)

• Passive IR to chest • Active distal extremity exercise (elbow, wrist, hand)

• Pendulum exercises • Frequent cryotherapy for pain, swelling, and inflammation management. Instruct on other techniques to reduce swelling such as arm elevation on pillows while lying supine with hand above elbow and elbow above heart. One pillow is placed under the elbow to keep the shoulder flexed about 20-30 degrees so that elbow is higher than the heart and a second pillow on the chest so the elbow is slightly flexed and the hand is higher than the elbow.

• Patient education regarding proper positioning and joint protection techniques

Late Phase I: (out of hospital – outpatient therapy to start 3-4 days post-op)

• Continue above exercises. Focus on achieving supine passive flexion in the scapular plane and passive ER to limits prescribed by Dr. Payne based on intra-operative findings.

• Begin scapula musculature isometrics

• Continue active elbow ROM. Avoid forcing full passive elbow extension and no biceps strengthening because a biceps tenodesis is typically performed at the time of the surgery.

• Continue cryotherapy as much as able for pain and inflammation management

• Patient may use operative side hand in front of the body for keyboarding, writing and reaching face with upper arm against the side.

• No lifting.

• No pulleys or AAROM.

Criteria for progression to the next phase (II): If the patient has not reached the below ROM, forceful stretching and mobilization/manipulation is not indicated. Continue gradual ROM and gentle mobilization (i.e. Grade I oscillations), while respecting soft tissue constraints.

• Tolerates PROM program

• Has achieved at least 90° PROM forward flexion and elevation in the scapular plane.

• Has achieved at least 30° PROM ER in plane of scapula

• Has achieved at least 40° PROM IR in plane of scapula measured at 30° of abduction

Phase II - Addition of AROM (out of the sling) (4 weeks post-op):

• Continue previous exercises

• Continue to progress passive flexion as motion allows. May start to increase passive ER to 45° or as prescribed by Dr. Payne.

• Begin assisted flexion, elevation in the plane of the scapula, ER, IR in the scapular plane. May start to use pulleys. May start to actively reach hand to head. May start to carry coffee cup in operative hand and may drive if off narcotics.

• Progress active distal extremity exercise to strengthening as appropriate but no biceps strengthening.

• No supporting of body weight by hand on involved side

Phase III – AROM and Early Strengthening Phase (6-8 weeks post-op) (Not to begin before 6 Weeks post-surgery to allow for appropriate soft tissue healing):

Goals:

• Restore passive ROM

• Gradually restore active motion

• Control pain and inflammation

• Allow continue healing of soft tissue

• Do not overstress healing tissue

• Re-establish dynamic shoulder stability

Precautions:

• In the presence of poor shoulder mechanics avoid repetitive shoulder AROM exercises/activity against gravity in standing.

• No heavy lifting of objects (no heavier than coffee cup)

• No supporting of body weight by hand on involved side

• No sudden jerking motions

Early Phase III:

• Continue with PROM, active assisted range of motion (AAROM). May increase ER as tolerated; initially at the side and then gradually increased in progressive abduction.

• Begin active flexion, IR, ER, elevation in the plane of the scapula pain free ROM.

• Continue AAROM pulleys (flexion and elevation in the plane of the scapula) – as long as greater than 90° of PROM

• Begin shoulder sub-maximal pain-free shoulder isometrics in neutral

• Scapular strengthening exercises as appropriate

• Begin assisted horizontal adduction

• Progress distal extremity exercises with light resistance as appropriate

• Gentle glenohumeral and scapulothoracic joint mobilizations as indicated

• Initiate glenohumeral and scapulothoracic rhythmic stabilization

• Continue use of cryotherapy for pain and inflammation.

Late Phase III:

• Progress scapular strengthening exercises

Criteria for progression to the next phase (IV): If the patient has not reached the below ROM, forceful stretching and mobilization/manipulation is not indicated. Continue gradual ROM and gentle mobilization (i.e. Grade I oscillations), while respecting soft tissue constraints.

• Tolerates P/AAROM, isometric program

• Has achieved at least 130° PROM forward flexion and elevation in the scapular plane.

• Has achieved at least 50+° PROM ER in plane of scapula

• Has achieved at least 60° PROM IR in plane of scapula measured at 30° of abduction

• Able to actively elevate shoulder against gravity with good mechanics to 100°.

Phase IV – Moderate strengthening (8-12 weeks post-op):

Goals:

• Gradual restoration of shoulder strength, power, and endurance

• Optimize neuromuscular control

• Gradual return to functional activities with involved upper extremity

Precautions:

• No heavy lifting of objects (no heavier than 10 lbs.)

• No sudden lifting or pushing activities

• No sudden jerking motions

Early Phase IV:

• Progress AROM exercise / activity as appropriate

• Advance PROM to stretching as appropriate

• Continue PROM as needed to maintain ROM

• Initiate assisted shoulder IR behind back stretch

• Resisted shoulder IR, ER in scapular plane

• Begin light functional activities

• Begin progressive supine active elevation strengthening (anterior deltoid) with light weights (0.5-1.5 kg.) at variable degrees of elevation

Late Phase IV:

• Resisted flexion, elevation in the plane of the scapula, extension (therabands / sport cords)

• Continue progressing IR, ER strengthening

• Progress IR stretch behind back from AAROM to AROM as ROM allows (Pay particular attention as to avoid stress on the anterior capsule.)

Phase V – Advanced Strengthening Phase (Not to begin before 12 Weeks to allow for appropriate soft tissue healing and to ensure adequate ROM, and initial strength):

Goals:

• Maintain non-painful AROM

• Enhance functional use of upper extremity

• Improve muscular strength, power, and endurance

• Gradual return to more advanced functional activities

• Progress weight bearing exercises as appropriate Precautions:

• Avoid exercise and functional activities that put stress on the anterior capsule and surrounding structures. (Example: no combined ER and abduction above 80° of abduction.)

• Ensure gradual progression of strengthening

Early Phase V:

• Typically patient is on a home exercise program by this point to be performed 3-4 times per week.

• Gradually progress strengthening program

• Gradual return to moderately challenging functional activities.

Late Phase V (Typically 4-6 months post-op):

Return to recreational hobbies, gardening, sports, golf, doubles tennis

Criteria for discharge from skilled therapy:

• Patient able to maintain non-painful AROM

• Maximized functional use of upper extremity

• Maximized muscular strength, power, and endurance

• Patient has returned to advanced functional activities

Need More Information? Watch these Helpful Videos from Dr. Payne on Post Operative Care