

Andrew J Blackman, MD

Bone & Joint Specialists of Chesterfield 121 St Luke's Center Drive, Suite 302 Chesterfield, MO 63017 (p) 314-523-2595 (f) 314-590-5947

Total Shoulder Replacement Physical Therapy Protocol

Phase I - Immediate Post-Surgical (0-6 weeks):

Goals:

- Allow healing of soft tissue
- Maintain integrity of replaced joint
- Gradually increase passive range of motion (PROM) of shoulder; restore active range of motion (AROM) of Elbow/Wrist/Hand
- Diminish pain and inflammation
- Prevent muscular inhibition
- Independent with activities of daily living (dressing, bathing, etc.) with modifications while maintaining the integrity of the replaced joint.
- · Re-establish dynamic shoulder stability

Precautions:

- Sling should be worn for 4 weeks, then for comfort only
- While lying supine a small pillow or towel roll should be placed behind the elbow to avoid shoulder hyperextension / anterior capsule / subscapularis stretch.
- You may do activities like "drinking coffee or reading the paper" immediately following surgery.
- No lifting of objects heavier than a coffee cup.
- No excessive shoulder motion behind back
- No excessive stretching or sudden movements (particularly external rotation)
- No supporting of body weight by hand on involved side

Postoperative Days # 10-21:

- Continue previous exercises
- Continue to progress PROM as motion allows
- Gradually progress to AAROM in pain free ROM
- Progress active distal extremity exercise to strengthening as appropriate
- Restore active elbow ROM

Week 4:

- Continue with PROM, AAROM, Isometrics
- Scapular Strengthening
- Begin Assisted Horizontal adduction

- Progress Distal Extremity Exercises with light resistance as appropriate
- Gentle Joint Mobilizations as indicated
- Initiate Rhythmic stabilization
- Continue use of cryotherapy for pain and inflammation.

Week 5-6:

- Begin Active forward flexion, internal rotation, external rotation, and abduction in supine position, in pain free ROM
- Progress scapular strengthening exercises
- Wean from Sling completely
- Begin isometrics of rotator cuff and periscapular muscles

Criteria for progression to next phase:

- Tolerates P/AAROM, isometric program
- Has achieved at least 140 degrees PROM flexion
- Has achieved at least 120 degrees PROM abduction.
- Has achieved at least 60+ degrees PROM ER in plane of Scapula
- Has achieved at least 70 degrees PROM IR in plane of Scapula
- Be able to actively elevate shoulder against gravity with good mechanics to 100 degrees.

Phase II – Active Range of Motion & Mild-Moderate strengthening (week 6-12):

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 5 lbs.)
- No sudden lifting or pushing activities

WEEKS 7-8:

- Increase anti-gravity forward flexion, abduction as appropriate
- Active internal rotation and external rotation in scapular plane
- Advance PROM as tolerated, begin light stretching as appropriate
- Continue PROM as need to maintain ROM
- Initiate assisted IR behind back
- Begin light functional activities

WEEKS 9-10

Begin progressive supine active elevation (anterior deltoid strengthening) with light weights (1-3 lbs) and variable degrees of elevation.



WEEKS 11-12:

- Begin resisted flexion, Abduction, External rotation (therabands/sport cords)
- Continue progressing internal and external strengthening
- Progress internal rotation behind back from AAROM to AROM as ROM allows (pay particular attention as to avoid stress on the anterior capsule.)

Criteria for progression to the next phase:

- Tolerates AA/AROM
- Has achieved at least 140 degrees AROM flexion supine
- Has achieved at least 120 degrees AROM abduction supine.
- Has achieved at least 60+ degrees AROM ER in plane of Scapula supine
- Has achieved at least 70 degrees AROM IR in plane of Scapula supine
- Be able to actively elevate shoulder against gravity with good mechanics to least 120 degrees.

Phase IV - Functional Rehabilitation (13+ weeks)

Goals:

- Maintain full non-painful active ROM
- Enhance functional use of UE
- Improve muscular strength, power, and endurance
- Gradual return to more advanced functional activities
- Progress closed chain 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 degrees of abduction.)
- Ensure gradual progression of strengthening.

Criteria for discharge from skilled therapy:

- Patient able to maintain full non-painful active ROM
- Maximized functional use of UE
- Maximized muscular strength, power, and endurance
- Patient has returned to more advanced functional activities

WEEK 13+:

- Typically patient is on just a home exercise program by this point 3-4x per week.
- Gradually progress strengthening program
- Gradual return to moderately challenging functional activities.

4-6 months:

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

