

Total Shoulder Arthroplasty REHAB Protocol

PHASE I: Weeks 0-4

Goals:

1. Allow healing of soft tissue
2. Maintain integrity of the replaced joint
3. Gradually increase PROM of shoulder; restore AROM of elbow/wrist/hand.
4. Diminish pain and inflammation
5. Prevent muscular inhibition
6. Independent with ADLs with modifications while maintaining the integrity of the replaced joint

ROM limits

- 90° of forward flexion
- 20° of external rotation at the side
- 75° of abduction without rotation

POD 2-10

- Assisted flexion and abduction in the scapular plane
- Assisted external rotation
- Begin submaximal, pain-free shoulder isometrics in neutral
- Begin scapular musculature isometrics/sets
- Begin active assisted elbow range of motion
- Pulleys (flexion and abduction) as long as greater than 90° of P ROM
- Continue cryotherapy as much as able for pain and inflammation management

Week 3

- Continue PROM, AAROM, isometrics
- Scapular strengthening
- Begin assisted core horizontal adduction
- Progressed distal extremity exercises with light resistance as appropriate
- Gentle joint mobilizations as indicated
- Initiate rhythmic stabilization
- Continue use of cryotherapy for pain and inflammation

PHASE II: Weeks 4-6 (early strengthening)

Goals:

1. Continue P ROM progression
2. Gradually restore active motion
3. Control pain and inflammation
4. Allow continued healing of soft tissue
5. Do not overstress healing tissue
6. Reestablish dynamic shoulder stability

Week 4

- Begin active forward flexion, IR, ER, abduction in supine position, and pain free or ROM
- Progressed scapular strengthening exercises
- Begin isometrics of rotator cuff and periscapular muscles

Precautions:

1. Sling should be worn at all times except for PT and exercises at home
2. While laying supine a small pillow or towel roll should be placed behind the elbow to avoid shoulder hyperextension/anterior capsule/subscapularis stretch
3. Avoid shoulder active range of motion for the first 4 weeks
 - No active internal rotation for the first 6 weeks
 - Limited passive external rotation to 20° at the side 4 weeks' 0-3, into 40° from weeks 4-6
4. No excessive shoulder motion behind back, no lifting
5. No excessive stretching or sudden movements (particularly ER)
6. No supporting her body weight by hand on the involved side

POD #10-21

- Continue previous exercises
- Continue to progress. ROM as motion allows
- Gradually progressed to a AAROM and pain-free range of motion
- Progressed active distal extremity exercise to strengthening as appropriate
- Restore active elbow range of motion

ROM limits

- 120° of forward flexion
- 40° of external rotation at the side
- 75° of abduction without rotation

Precautions:

1. Sling should be used for sleeping and may be removed for a few hours throughout the day or the next 2 weeks.
2. While laying supine a small pillow roll or towel should be placed behind the elbow to avoid shoulder hyperextension/anterior capsule stretching
3. Begin shoulder AROM against gravity
4. No lifting
5. No supporting of body movements by hands and arms, no sudden jerking motions



PHASE III: Weeks 6-12 (moderate strengthening)

Goals:

1. Gradual restoration of shoulder strength, power and endurance
2. Optimize neuromuscular control
3. Gradual return to functional activities with involved upper extremity

Precautions:

1. No heavy lifting of objects (no heavier than 5 pounds)
2. No sudden lifting or pushing activities
3. No sudden jerking motions
4. Wean out of the sling and pillow

Week 4

- Increased antigravity forward flexion, abduction as appropriate
- Active internal rotation and external rotation and scapular plane
- Advanced pre-AROM as tolerated, begin light strengthening as appropriate
- Continue P ROM as needed to maintain ROM
- Initiate assisted IR behind back
- Begin light functional activities

Week 8

- Begin progressive supine active elevation (anterior deltoid strengthening) with light weights (123 pounds) and variable degrees of elevation

Weeks 10-12

- begin resisted flexion, abduction, ER (Thera-Band and 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)

PHASE IV: Weeks 12- 6 months (Advanced strengthening)

Goals:

1. Maintain full, nonpainful active ROM
2. Enhance functional use of upper extremity
3. Improve strength, power, endurance
4. Gradual return to more advanced functional activities
5. Progress close chain exercises as appropriate

Precautions:

1. Avoid exercise and functional activities that put stress on the anterior capsule and surrounding structures
2. Ensure gradual progression of strengthening
3. Begin shoulder AROM against gravity
4. No lifting
5. No supporting of body movements by hands and arms, no sudden jerking motions

Criteria for discharged from skilled therapy

1. Patient able to maintain full and nonpainful active range of motion
2. Maximized functional use of upper extremity
3. Maximized muscular strength, power and endurance
4. Patient has returned to more advanced functional activities

Weeks 12+

- Typically patient is on just a home exercise program by this 0.3-4 times per week
- Gradually progress strengthening program
- Gradual return to moderately challenging functional activities

4-6 months

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