Post-Operative Shoulder Rehabilitation

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ORTHOWASHINGTON
Diagnosis and Treatment of Orthopedic Injuries
Post-Operative Shoulder Rehabilitation

PHASE 1
Immediate postoperative period (weeks 0 to 6)

Goals
1. Maintain / protect the integrity of repair.
2. Gradually increase PROM.
4. Become independent with modified ADLs.

Precautions
1. Maintain arm in sling, remove only for exercise.
2. No shoulder AROM, lifting of objects, shoulder motion behind the back, excessive stretching or sudden movements, supporting of any weight, lifting a body weight by hands.

Criteria for Progression to Phase 2
1. Passive forward flexion to >125°.
2. Passive ER in scapular plane > 75° (if uninvolved shoulder PROM > 80°).
3. Passive IR in scapular plane to > 75° (if uninvolved shoulder PROM > 80°).
4. Passive abduction > 90° in the scapular plane.

Days 1 to 6
1. Sling at all times.
2. Pendulum exercises.
3. Finger, wrist, and elbow AROM.
4. Begin scapula musculature isometrics / sets; cervical ROM.
5. Cryotherapy for pain and inflammation.

Days 3 to 6
1. Begin pulley exercises in forward flexion and abduction < 90°.
2. Maintain proper posture, joint protection, positioning and hygiene.

Days 7 to 28
1. Continue with sling at night and day for comfort.
2. Pendulum / pulley exercises.
3. Begin PROM to tolerance (done supine; should be pain free).
   a. Flexion to 90°.
   b. ER in scapular plane to > 35°.
   c. IR to body / chest.
   d. Continue elbow, wrist, and finger AROM / resisted.
4. Cryotherapy is needed for pain control and inflammation.
5. May resume general conditioning program (e.g., walking, stationary bike).
6. Aquatherapy / pool therapy may begin three weeks postoperative.

Abbreviations
AAROM = active assisted range of motion
ADL = activity of daily living
AROM = active range of motion
ER = external rotation
IR = internal rotation
PROM = passive range of motion
ROM = range of motion
PHASE 2
Protection and active motion (weeks 6 to 12)

Goals
1. Allow healing of soft tissue.
2. Do not overstress healing tissue.
3. Gradually restore full PROM (weeks 4 to 5).
4. Decrease pain and inflammation.

Precautions
1. No lifting.
2. No supporting body weight with hands and arms.
3. No sudden jerking motions.
4. No excessive behind the back movements.
5. Avoid upper extremity bike and ergometer.

Criteria for progression to Phase 3
1. Full AROM.

Weeks 5 to 6
1. Discontinue sling at night.
2. Between weeks 4-6, use sling for comfort only.
3. Discontinue sling at end of week 6.
4. Initiate AAROM flexion in supine position.
5. Progressive PROM until approximately full ROM at weeks 4 to 5.
6. Gentle scapular / glenohumeral joint mobilization to regain full PROM.
7. Initiate prone rowing to the neutral arm position.
8. Continue cryotherapy as needed.
9. May use heat before ROM exercises.
10. Aquatherapy OK for light AROM exercises.
11. Ice after exercise.

Weeks 6 to 9
1. Continue AROM, AAROM, and stretching exercises.
2. Begin rotator cuff isometrics.*
3. Continue periscapular exercises.
4. Initiate AROM exercises (flexion scapular plane, abduction, ER, IR).

* Please note: Patient must be able to elevate arm without shoulder or scapular hiking before initiating isotonics. If unable, continue glenohumeral joint exercises.
PHASE 3
Early strengthening (weeks 10 to 16)

Goals
1. Full AROM (weeks 10 to 16).
2. Maintain full PROM.
3. Dynamic shoulder stability.
4. Gradual restoration of shoulder strength, power, and endurance Optimize neuromuscular control.
5. Gradual return to functional activities.

Precautions
1. No lifting objects >5 pounds, sudden lifting or pushing activities, sudden jerking motions, overhead lifting
2. Avoid upper extremity bike and ergometer

Criteria for progression to Phase 4
1. Ability to tolerate progression to the low level functional activities.
2. Demonstrated return of strength / dynamic shoulder stability.
3. Reestablishment of dynamic shoulder stability.
4. Demonstrated adequate strength and dynamic stability for progression to more demanding work and sport-specific activities.

Weeks 10 to 11
1. Continue stretching and PROM, as needed.
2. Dynamic stabilization exercises.
3. Initiate strengthening program:
   a. ER and IR with exercise bands / sports cord / tubing.
   b. ER side-lying (lateral decubitus).
   c. Lateral raises.*
   d. Full can in scapular plane.* (no empty can abduction exercises)
   e. Prone rowing.
   f. Prone horizontal abduction.
   g. Prone extension.
   h. Elbow flexion.
   i. Elbow extension.

*Please note: Patient must be able to elevate arm without shoulder or scapular hiking before initiating isotonics. If unable, continue glenohumeral joint exercises.

Weeks 12 to 13
1. Continue all exercises listed above.
2. Initiate light functional activities as permitted.

Weeks 14 to 16
1. Continue all exercises listed above.
2. Progress to fundamentals shoulder exercises.
PHASE 4
Advanced strengthening (weeks 16 to 22)

Goals
1. Maintain full non-painful AROM.
2. Advance conditioning exercises for enhanced functional use.
3. Improve muscular strength, power and endurance.
4. Gradual return to full activities.

Weeks 16 to 19
1. Continue ROM and self-capsular stretching for ROM maintenance.
2. Continue progression of strengthening.
3. Advance proprioceptive, neuromuscular activities.
4. Light sports (golf chipping / wedges, tennis ground strokes) if doing well.

Weeks 20 to 22
1. Continue strengthening and stretching.
2. Continue stretching if motion is tight.
3. Initiate interval sports program (e.g., golf, doubles tennis) if appropriate.