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REVERSE TOTAL SHOULDER ARTHROPLASTY PROTOCOL

Shoulder Dislocation Precautions

This rehabilitation protocol has been developed for the patient following a **Reverse Total Shoulder Arthroplasty**. ***Precautions should be implemented for the first 16 weeks postoperatively*** unless surgeon specifically advises patient or therapist differently. This protocol has been divided into phases. Each phase may vary slightly based on individual patient and special circumstances. ***Progression to the next phase is based on clinical criteria and time frames as appropriate.***

PHASE 1: IMMEDIATE POST SURGICAL PHASE – JOINT PROTECTION **(DAY 1 – WEEK 6)**

Goals:

- Patient and family independent with:
 - Joint protection
 - Passive Range of motion (PROM) after two weeks
 - Assisting with putting on / taking off sling and clothing
 - Assisting with Home exercise program (HEP)
 - Cryotherapy
 - Continuous Cryotherapy for first 72 hours post operatively
- Promote healing of soft tissue
- maintain the integrity of the replaced joint
- Enhance PROM after two weeks
- Restore active range of motion (AROM)
 - Elbow
 - Wrist
 - Hand
- Independent with Activities of daily living (ADL'S) with modification

Precautions:

- Sling is to be worn for 2 – 3 weeks postoperatively
- While lying supine, the distal humerus / elbow should be supported by a pillow or towel roll to avoid shoulder extension. Patients should be advised to always be able to visually see their elbow when lying supine
- No Shoulder Active Range of Motion
- No lifting of objects with operative extremity
- No supporting of body weight with involved extremity
- Keep incision clean and dry :
 - No soaking / wetting for 2 weeks
 - No Submerging for 4 weeks minimum
 - No Whirlpool
 - No Jacuzzi
 - No ocean / lake wading

Day 14 (Acute Care Therapy)

- Begin PROM in supine
 - In supine position
 - Forward flexion and elevation in the scapular plane to 90 degrees
 - External rotation in scapular plane to available ROM as indicated by operative findings
 - Typically no more than 20-30 degrees
 - *NO Internal Rotation*
- AROM / AAROM:
 - Cervical Spine
 - Elbow
 - Wrist / Hand
- Begin peri-scapular submaximal pain – free isometrics in the scapular plane
- Continue Cryotherapy
 - 4 – 5 times a day for approx. 20 minutes

Days 15 - Day 21

- Continue all exercises as above
- Begin submaximal pain – free deltoid isometrics in scapular plane
 - Avoid shoulder extension when isolating posterior deltoid
- Continue Cryotherapy
 - 4 – 5 times a day for approx. 20 minutes

Weeks 3 to 6

- Progress exercises as listed above
- Progress PROM
 - Supine Position:
 - Forward flexion and elevation in the scapular plane to 120 degrees
 - External rotation in scapular plane to tolerance

- Respective soft tissue restraints
 - Start Internal Rotation in scapular plane to tolerance
 - *Not to exceed 50 degrees*
- Gentle Resisted exercise of elbow, wrist, and hand
- Continue with Cryotherapy

***** Criteria for Progression to next phase (Phase II) *****

- Patient tolerates shoulder PROM and AROM program for elbow, wrist, and hand
- Patient demonstrates the ability to isometrically activate all components of the deltoid and periscapular musculature in the scapular plane

PHASE II: AAROM & EARLY STRENGTHENING PHASE (WEEKS 6 TO 12)

Goals:

- Continue progression of PROM
 - Full PROM is NOT expected
- Gradually restore AROM
- Control Pain and Inflammation
- Allow continued healing of soft tissue
 - Do not overstress healing tissue
- Re-establish dynamic shoulder stability

Precautions:

- Continue to avoid shoulder hyperextension
- In the presence of poor shoulder mechanics avoid repetitive shoulder AROM exercises / Activity
- Restrict Lifting of objects
 - No heavier than a coffee cup
- No supporting of body weight by the involved upper extremity

Weeks 6 to 8

- Continue with PROM Program
- Begin Shoulder AAROM and AROM as appropriate
 - Active Forward flexion and elevation in scapular plane
 - First in supine
 - Progress to sitting and standing
 - Active ER and IR in the scapular plane
 - First in supine
 - Progress to sitting and standing
- Begin Gentle GH submaximal *pain – free* isometrics
 - Internal Rotation

- External Rotation
- Initiate Gentle Scapulothoracic rhythmic stabilization and alternating isometrics in supine as appropriate.
- Begin Gentle Periscapular and deltoid submaximal *pain - free* isotonic strengthening exercises, *typically toward the end of the 8th week*
- Progress strengthening of elbow, wrist, and hand
- Gentle GH and Scapulothoracic joint mobilizations as indicated
 - Grade I and II
- Continue use of cryotherapy as needed
- Patient may begin to use hand of operative extremity for feeding and light ADL's

Weeks 9 to 12

- Continue with Above exercises and functional activity progression
- Begin AROM with light weights (1 - 3 lbs.)
 - Forward flexion and elevation in the scapular plane
 - Perform at varying degrees of trunk elevation as appropriate
 - Supine lawn chair program with progression to sitting /standing
- Progress to gentle Glenohumeral IR / ER isotonic strengthening exercises

***** *Criteria for progression to next phase (Phase III)* *****

- Improving function of shoulder
- Patient demonstrates the ability to isotonicly activate all components of the deltoid and periscapular musculature and is gaining strength.

PHASE III: MODERATE STRENGTHENING (WEEKS 12 +)

Goals:

- Enhance functional use of operative extremity and advance functional activities
- Enhance shoulder mechanics, muscular strength, power, and endurance

Precautions:

- No lifting of objects heavier than 6 lbs. with the operative upper extremity
- No sudden lifting or pushing activities

Weeks 12 to 16

- Continue with previous program as indicated
- Progress to gentle resisted flexion in standing as appropriate

PHASE IV: CONTINUED HOME PROGRAM **(TYPICALLY 4+ MONTHS POST OPERATIVELY)**

***** Typically the patient is on a HEP at this stage, to be performed 3 – 4 times per week with the focus on the following *****

- Continued Strength Gains
- Continued progression towards return to functional and recreational activities within limits
 - identified by progress made during rehabilitation
 - and outlined by surgeon and physical therapist

***** Criteria for Discharge from Skilled Physical Therapy *****

- Patient is able to maintain pain free shoulder AROM
 - With proper shoulder mechanics
 - Typically 80-120 degrees of elevation with functional external rotation of 30 degrees