



AUCKLAND BONE AND JOINT SURGERY

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ROTATOR CUFF REPAIR REHABILITATION PROTOCOL

Phase 1:

Begins immediately after surgery to approximately 4 weeks post-op

1. Sling for everyone (with or without abduction pillow as directed by Dr. Boyle)
2. Cryotherapy as needed for pain relief (cryocuff or ice pack)
3. NO pendulum exercises
4. Active wrist/passive elbow ROM exercises
5. Grip exercises
6. Scapular exercises
7. Day 10-14 suture removal
8. Begin PROM (no active ROM for 8 weeks post-op)
 - Elevation to 90° (supine flexion using contralateral arm, scapular plane elevation)
 - ER to 40° at 0°, 45°, 90° elevation in the scapular plane
9. Aquatic/pool therapy (2-4 weeks post-op)
 - Shoulders totally submerged
 - Slow active motion within precautionary ROM with emphasis on good biomechanics
 - No coronal plane abduction

Phase 2:

From 4-8 weeks post-op for small/medium tears < 3 cm

From 6-10 weeks post-op for large/massive tears >3 cm

1. Wean from sling/abduction pillow - sling wear discouraged except as a visible sign of vulnerability in uncontrolled environment
2. Passive ROM - joint mobilization and stretching towards full ROM in all directions (emphasize isolated glenohumeral elevation)
 - Elevation to 140° (supine flexion using contralateral arm, scapular plane elevation)
 - ER to 40° at 0°, 45°, 90° elevation in the scapular plane
 - IR with thumb tip to L1 (40°)
3. Aquatic/pool therapy - continue same exercises as in phase 1 without ROM limitations - increase speed of movement as tolerated

Phase 2 Home Exercise Program

1. Stretching for full ROM in all directions
2. Passive exercise as directed by physiotherapist
3. Cryotherapy prn

Phase 3:

From 8-12 weeks post-op for small/medium tears

From 10-14 weeks post-op for large/massive tears

1. Glenohumeral/scapulothoracic joint mobilisation/PROM - (target: achieve full ROM by 12 weeks post-op)
2. Strengthening
3. AROM/initial strengthening
 - Minimal manual resistance for isometric ER/IR at 0°, 45°, and 90° in supine position with arm supported as needed
 - Minimal manual resistance for rhythmic stabilisation of glenohumeral joint at multiple angles in supine position (60°, 90°, 120°)
 - AAROM progressing to AROM for elevation in supine - elevate head of bed as appropriate, maintaining good mechanics
 - ER in side-lying position
 - Light periscapular strengthening as appropriate (prone rowing, prone shoulder extension)
 - Continue manual resistance - rhythmic stabilisation for IR/ER (0, 45, 90 degrees abduction) and rhythmic stabilisation (flex, ext, hor abd/add) at 45, 60, 90, 120 degrees elevation in scapular plane
 - AROM elevation/scaption in standing (must be performed in ROM that allows for good biomechanics; use mirror for feedback)
 - Aquatic/pool therapy - increases speed of movement, progress to using hand as a "paddle" and then to webbed gloves for increased resistance as tolerated
 - Slowly add light resistance (theraband or light dumbbells) as patient gains control of movement with good biomechanics - include the following exercises:
 - Elevation in scapular plane (initially supine, progress to inclined, then upright)
 - Prone rowing
 - Serratus "punches"
 - Side-lying ER
 - Prone extension, horizontal abduction
 - ER and extension with theraband
 - Progress to IR on light pulleys or theraband

Phase 3 Home Exercise Program

1. Passive stretching for full ROM
2. Light strengthening exercises as directed by physiotherapist

Phase 4:

From 12-16 weeks post-op

- Refer to Dr. Boyle for advice regarding specific activity restrictions
- 1. Joint mobilisation (glenohumeral/scapulothoracic) and PROM as needed if full ROM not yet achieved
- 2. Progress strengthening exercises in phase 3 with increasing weight as tolerated
- 3. Add gym machines as appropriate (chest press, rowing, latissimus pull-down, triceps, biceps) and IR/ER at 90 degree abduction
- 4. May start isokinetics for IR/ER beginning in a modified position with moderate speeds (120°-240°)

Phase 4 Home Exercise Program

1. Stretching to maintain ROM as needed
2. Strengthening as directed by physiotherapist - patient should have independent strengthening program prior to discharge from physiotherapy

Phase 5:

From 16-24 weeks post-op

1. Functional progression for sports and activity-specific tasks (i.e. golf, tennis)
2. Interval sport programs as indicated
3. Advanced strengthening as indicated

ROM = range of motion

AROM = active range of motion

IR = internal rotation

PROM = passive range of motion

AAROM = active assisted range of motion

ER = external rotation