



ORTHOPEDIC SURGERY

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PODIATRY

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CLINIC LOCATIONS

Spencer
 Storm Lake
 Spirit Lake
 Estherville
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OFFICE LOCATIONS

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**POSTOPERATIVE REHABILITATION PROTOCOL:
 SMALL-MEDIUM ROTATOR CUFF REPAIR**

Tear Size:	Biceps Tenodesis:	Distal Clavicle Resection:
<input type="checkbox"/> Small	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
<input type="checkbox"/> Medium	<input type="checkbox"/> No	<input type="checkbox"/> No

Phase 1: Weeks 0-6

- No active ROM exercises
- Limited supine position passive ROM only
 - 140 degrees of forward flexion weeks 0-4
 - 45 degrees of external rotation
 - 100 degrees of abduction without rotation
 - May progress supine passive forward flexion to 150 degrees at week 4 as patient tolerates
 - Pendulums (Codman's)
 - May do table slides (or equivalent) at 10-14 days, hand resting on table, torso leaning forward, pain free, within limits of forward elevation as outlined above
 - Pulleys at 4wks for small tear
 - Pulleys at 6wks for medium tear
 - Use of sling for protection for 6wks
 - Sling may be removed during day when sitting upright in chair prn, but with strict instructions for no active shoulder motion
 - Sling should be worn at night
 - Therapeutic modalities:
 - Ice, ultrasound, E-stim
- Elbow ROM:
 - Passive progress to active motion
 - 0-130 degrees
 - Pronation and supination as tolerated
 - Note: if biceps tenodesis, no active elbow flexion or forearm

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- Wrist ROM
 - Full all planes
 - Grip strengthening as tolerated

Criteria for Progression to Phase 2

- At least 6wk of recovery has elapsed
- Painless passive ROM to:
 - 130 degrees of forward flexion
 - 30 degrees of external rotation
 - 60 degrees of abduction

Phase 2: Weeks 6-12

- No strengthening/resisted motion of the shoulder until 12wk after surgery, unless indicated otherwise
- Discontinuation of sling
- Therapeutic modalities
- Ice, ultrasound, E-Stim
- Moist heat before therapy, ice at the end of session
- Shoulder ROM goals:
 - 150 degrees of forward flexion-progress to 160-170 degrees
 - 30 degrees of external rotation-progress to 60 degrees
 - 60 degrees of abduction- progress to 90 degrees
- Continue with passive ROM exercise to achieve above goals
- Begin active-assisted ROM exercises for the above goals
 - Progress to active ROM exercises as tolerated after full motion achieved with active-assisted exercises
 - Light passive stretching at end ROMs
 - Pendulums and pulleys (or other equivalent)
 - Some early strengthening may be allowed depending on certain patient factors and tear/repair characteristics. This is at the surgeon's discretion
- Continue with grip strengthening

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Criteria for Progression to Phase 3

- Painless active ROM
- No shoulder pain or tenderness
- Satisfactory clinical examination

Phase 3: 3 Months- 6 Months

Goals

- Improve shoulder strength, power, and endurance
- Improve neuromuscular control and shoulder proprioception
- Prepare for gradual return to functional activities
- Establish a home exercise maintenance program that is performed at least three times per week for strengthening
- Stretching exercises should be performed daily

Motion

- Achieve motion equal to contralateral side
- Use passive, active-assisted and active ROM exercises
- Passive capsular stretching at end ROMs especially cross body (horizontal) adduction and internal rotation to stretch the posterior capsule

Muscle Strengthening

- Strengthening of the rotator cuff
- Begin with closed chain isometric strengthening
- Internal rotation
- Abduction
- Forward flexion
- Extension
- Progress to open chain strengthening with free weight (i.e. dumbbells)
- Exercises performed with the elbow flexed to 90 degrees
- Starting position is with the shoulder in the neutral position of 0 degrees of forward flexion, abduction and external rotation. The arm should be comfortable at the patient's side

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- Weight progression typically with light object and increasing gradually in 1-2 pound increments
- Progression to the next weight level occurs usually in 2-3 wk intervals. Patients are instructed not to progress to the next level if there is any discomfort at the present level
- Internal rotation
- External rotation
- Abduction
- Forward flexion
- Extension
- Strengthening of deltoid especially anterior deltoid
- Strengthening of scapular stabilizers
- Closed chain strengthening exercise
- Scapular retraction (rhomboids, middle trapezius)
- Scapular protraction (serratus anterior)
- Scapular depression (latissimus dorsi, trapezius, serratus anterior)
- Shoulder shrugs (trapezius, levator scapulae)
- Progress to open chain scapular stabilizer strengthening

Goals

- Three times per week
- Begin with 10 for one set, advance to 8 to 12 repetitions for three sets
- Functional strengthening: (begins after 70% of strength recovered)
- Plyometric exercises
- Progressive, systematic interval program for returning to sports
 - Throwing athletes
 - Tennis players
 - Golfers

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Maximal Improvement

- Small tears 4-6 mos.
- Medium tears 6-8

Patient will continue to show improvement in strength and function for at least 12 mos.

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