

University Orthopaedics RTC Repair (Medium to Large Tear) Rehabilitation Timeline

| | | <i>Timeline</i> |
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| Sling: | Discharge sling after 4-8 weeks if patient is pain-free at rest | 4-8 weeks |
| PROM: | <ul style="list-style-type: none"> • Shoulder Flexion: 0 - 120 degrees • Shoulder Flexion: 0 - 140 degrees • Shoulder POS: 0 - 130 degrees ER: 60 degs / IR: 40 degs (@ 45 degs POS) • Shoulder Flexion/POS: 145 degs ER: 70 degs / IR: 40 degs (@ 45 degs POS) • Shoulder Flexion/POS: 150 degs ER: 75 degs / IR: 45 degs (@ 60 degs POS) • Shoulder Full PROM | 0 - 2 week 2 - 4 weeks 4 - 6 weeks 6 - 8 weeks 8 - 12 weeks |
| AROM: | <ul style="list-style-type: none"> • Shoulder Flexion/POS: 135 degs ER: 60 degs / IR: 35 degs (@ 60 degs POS) • Shoulder Flexion/POS: 150 degs ER: 70 degs / IR: 45 degs (@ 60 degs POS) | 6 - 8 weeks 8 - 12 weeks |
| Muscle Strength | NO ACTIVE FIRING OF REPAIRED RTC MUSCULATURE 4- /5 throughout shoulder, except repaired tissue 3- /5 4+ /5 throughout shoulder, except repaired tissue 4- /5 60% -80% through repaired tissue 100% through repaired tissue | 4 - 6 weeks 8 weeks 12 weeks 4 - 6 months 6 - 8 months |
| Functional Goals: | Return to LE Sports (soccer, running, etc) Return to UE Sports (basketball, tennis, baseball, etc) | 4-8 months 6 - 9 months |

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University Place Orthopaedics
RTC Repair (Medium to Large Tear) Rehabilitation Protocol
Phase I Weeks 0-4

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| Goals By End of Week 4 | <ul style="list-style-type: none"> Control Inflammation / Pain Allow healing of surgically repaired tissue PROM: Flexion- 140 degs, POS- 130 degs, ER- 60 degs, IR- 40 degs. Normal glenohumeral joint mobility Prevent atrophy of forearm and scapular musculature Discharge sling by 4-6 weeks | |
| Evaluation | <ul style="list-style-type: none"> Pain Surgical Portals Glenohumeral Joint Mobility PROM | Goals Controlled Healing w/o infection Normal Flexion- 140 degs POS- 130 degs ER- 60 degs (@45 degs POS) IR- 40 degs (@45 degs POS) |
| Treatment Week 0 - 2 3-4 x's/day 3-4x's/day by Therapist 2-3 x's day pm | AAROM Puleys (Shoulder flexion only) Pendulum Exercises (cw, ccw, flexion/extension) Strengthening Wrist/Hand PRE's Joint Mobilization Posterior / Inferior glides (grade I & II, for pain control) PROM - flexion and ER Modalities EMS to RTC musculature (10 on / 20 off) Cold Pack/Interferential Stimulation | x 30 reps x 30 reps 3 x 10 reps 5 minutes 12 mins. 15 mins |
| Week 2 - 4 3-4 x's/day 3-4x's/day by Therapist 2-3 x's day pm | AAROM Puleys (Shoulder flexion) Puleys (Shoulder POS) → pain-free motion Pendulum Exercises (cw, ccw, flexion/extension) Strengthening Wrist/Hand PRE's Scapular Retraction Isometrics Cardiovascular training for LE's Joint Mobilization Posterior / Inferior glides (grade I & II, for pain control) PROM - flexion, POS, and ER Modalities EMS to RTC musculature (10 on / 20 off) Cold Pack/Interferential Stimulation | x 30 reps x 30 reps x 30 reps 3 x 10 reps 3 x 10 reps 15+ minutes 5 minutes 12 mins. 15 mins |

*** NO ACTIVE FIRING OF REPAIRED RTC MUSCLES FOR 4-6 WEEKS ***

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Phase 2 Weeks 4 - 8

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| Goals By End of Week 8 | <ul style="list-style-type: none"> Control Inflammation / Pain PROM: Flexion/POS- 150 degs, ER- 75 degs, IR- 45 degs Normal glenohumeral joint mobility Muscle Strength - 4-15 throughout shoulder musculature, except repaired tissue 3-15 Mild scapulothoracic rhythm imbalances Discharge sling by 8 weeks | |
| Evaluation | <ul style="list-style-type: none"> Pain Muscle Strength Glenohumeral Joint Mobility Scapulothoracic Rhythm PROM | Goals Controlled → Eliminated 4-15 MMT, except RTC- 3-15 Normal Mild imbalance Flexion- 150 degs POS- 150 degs ER- 75 degs (@90 degs POS) IR- 45 degs (@60 degs POS) |
| Treatment Week 4 - 8 1 - 2 x's/day 1 - 2 x's/day by Therapist 2-3 x's day pm | AAROM Pulleys (Shoulder flexion/POS) Table Stretch for external rotation Supine Cane Exercise (flexion) Strengthening Wrist/Hand PRE's ISOMETRICS a) Internal/External Rotation (submaximal) b) Shoulder flexion, abduction, extension, adduction PRE's a) Scapular Retractions b) Scapular Protractions (serratus punch) Proprioception PNF Scapular Patterns Joint Mobilization/PROM Posterior / Inferior / Anterior glides (grade I -III) PROM - flexion, POS, ER, and light IR Modalities EMS to RTC musculature (10 on / 20 off) Cold Pack | x 30 reps x 10 reps/Hold 10 secs x 15 reps/Hold 5 secs 3 x 10 reps/Hold 2 secs x 20 reps / Hold 10 secs x 20 reps / Hold 10 secs 3 x 10 reps/Hold 2 secs 3 x 10 reps/Hold 2 secs 5 minutes 12 mins. 15 mins |
| Week 8 - 8 1 - 2 x's/day 3 - 4 x's/week 3 - 4 x's/week by Therapist pm | AAROM Table Stretch for external rotation Towel Stretch for internal rotation Supine Cane Exercise (flexion) Strengthening PRE's a) Scapular Retractions b) Scapular Protractions (serratus punch) c) Internal/External Rotation d) Plane of Scapula e) Supraspinatus f) Shoulder Flexion g) Bicep / Tricep Proprioception PNF GHJ (rhythmic stabilization → diagonal patterns) Closed Kinetic Chain exercises for scapular and GHJ dynamic stabilization Joint Mobilization Posterior / Inferior / Anterior glides (grade III & IV - if limitations) PROM - flexion, POS, ER, and IR Modalities Cold Pack | x 10 reps/Hold 10 secs x 10 reps/Hold 10 secs x 15 reps/Hold 5 secs 3 x 10-12 reps/Hold 2 secs 3 x 10-12 reps/Hold 2 secs 3 x 10-12 reps/Hold 2 secs 3 x 10-12 reps/Hold 2 secs 3 x 10-12 reps/Hold 2 secs 3 x 10-12 reps/Hold 2 secs 3 x 10-12 reps/Hold 2 secs 3 x 10-12 reps/Hold 2 secs 5 minutes 5 minutes 15 mins |

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Phase 3 Weeks 8 - 12

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| Goals By End of Week 12 | <ul style="list-style-type: none"> • Eliminate Pain • PROM: WNL • AROM: Flexion/POS- 150 degs, ER- 70 degs, IR- 45 degs • Normal glenohumeral joint mobility • Muscle Strength - 4+/5 throughout shoulder musculature, except repaired tissue 4-/5 • Mild scapulohumeral rhythm imbalances | Goals Controlled → Eliminated WNL Flexion/Abduction- 150 degs ER-70 degs IR- 45 degs 4+/5 MMT, except RTC 4-/5 Normal Mild imbalances |
| Evaluation | <ul style="list-style-type: none"> • Pain • PROM • AROM • Muscle Strength • Glenohumeral Joint Mobility • Scapulohumeral Rhythm | Goals Controlled → Eliminated WNL Flexion/Abduction- 150 degs ER-70 degs IR- 45 degs 4+/5 MMT, except RTC 4-/5 Normal Mild imbalances |
| Treatment Week 8 - 10 3-4 x's/week by Therapist pm | <p>Strengthening PRE's</p> <ol style="list-style-type: none"> a) Scapular Retractions b) Scapular Protractions (serratus punch) c) Internal/External Rotation d) Plane of Scapula e) Supraspinatus f) Shoulder flexion g) Bicep / Tricep <p>Proprioception PNF GHJ (diagonal patterns w/ resistance) Closed Kinetic Chain exercises for scapular and GHJ dynamic stabilization</p> <p>Joint Mobilization Posterior / Inferior / Anterior glides (grade III & IV - if limitations) PROM - flexion, POS, ER, and IR</p> <p>Modalities Cold Pack</p> | <p>3 x 10-15 reps/Hold 2 secs 3 x 10-15 reps/Hold 2 secs 3 x 10-15 reps/Hold 2 secs 3 x 10-15 reps/Hold 2 secs 3 x 10-15 reps/Hold 2 secs 3 x 10-15 reps/Hold 2 secs 3 x 10-15 reps/Hold 2 secs</p> <p>3 x 10 reps/ Hold 2 secs 5 minutes</p> <p>15 mins</p> |
| Week 10 - 12 3-4 x's/week by Therapist pm | <p>Strengthening PRE's</p> <ol style="list-style-type: none"> a) CYBEX - Scapular Row Machine b) Scapular Protractions (serratus punch) c) Internal/External Rotation d) Plane of Scapula e) Supraspinatus f) Shoulder flexion g) Bicep / Tricep h) Latissimus Pull i) Shoulder Press j) UBE (forward / backward - 90 rpm's) k) CYBEX 6000 - RTC Strengthening: (@90, 120, 180, 240 degs/sec) <p>Proprioception Closed Kinetic Chain exercises for scapular and GHJ dynamic stabilization</p> <p>Joint Mobilization Posterior / Inferior / Anterior glides (grade III & IV - if limitations) PROM - flexion, POS, ER, and IR</p> <p>Modalities Cold Pack</p> | <p>3 x 10-15 reps/Hold 2 secs 3 x 10-15 reps/Hold 2 secs 3 x 10-15 reps/Hold 2 secs 3 x 10-15 reps/Hold 2 secs 3 x 10-15 reps/Hold 2 secs 3 x 10-15 reps/Hold 2 secs 3 x 10-15 reps/Hold 2 secs 3 x 10-15 reps/Hold 2 secs 3 x 10-15 reps/Hold 2 secs 3 x 10-15 reps/Hold 2 secs 3 x 10-15 reps/Hold 2 secs 5-10 minutes 3 sets x 15 reps each speed</p> <p>5 minutes</p> <p>15 mins</p> |

