

University Place Orthopaedics

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University Orthopaedics RTC Repair (Small) Rehabilitation Timeline

		Timeline
Sling:	Discharge sling after 2-3 weeks if patient is pain-free at rest	2-3 weeks
PROM:	<ul style="list-style-type: none"> • Shoulder Flexion: 0 - 120 degrees • Shoulder Flexion: 0 - 145 degrees • Shoulder POS: 0 - 130 degrees • ER: 60 degs / IR: 40 degs (@ 45 degs POS) • Shoulder Flexion/POS: 85% PROM • ER: 75 degs / IR: 50 degs (@ 45 degs POS) • Shoulder Flexion/POS: PROM WNL • ER: 85 degs / IR: 50 degs (@ 90 degs POS) • Shoulder Full AROM 	<p>0 - 2 week</p> <p>2 - 4 weeks</p> <p>4 - 6 weeks</p> <p>6 - 8 weeks</p> <p>8 - 12 weeks</p>
Muscle Strength	<p>NO ACTIVE FIRING OF REPAIRED RTC MUSCULATURE</p> <p>4 /5 throughout shoulder, except repaired tissue 3-/5</p> <p>5 /5 throughout shoulder, except repaired tissue 4-/5</p> <p>80% -90% through repaired tissue</p>	<p>0 - 3 weeks</p> <p>8 weeks</p> <p>12 weeks</p> <p>4 - 6 months</p>
Functional Goals:	<p>Return to LE Sports (soccer, running, etc)</p> <p>Return to UE Sports (basketball, tennis, etc)</p>	<p>3 - 4 months</p> <p>4 - 6 months</p>

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University Place Orthopaedics
RTC Repair (Small) Rehabilitation Protocol
Phase I Weeks 0 -4

Goals By End of Week 4	<ul style="list-style-type: none"> • Control inflammation / Pain • Allow healing of surgically repaired tissue • PROM: Flexion- 145 degs, POS- 130 degs, ER- 60 degs, IR- 40 degs. • Normal glenohumeral joint mobility • Prevent atrophy of forearm and scapular musculature • Discharge sling by 2 - 3 weeks 	
Evaluation	<ul style="list-style-type: none"> • Pain • Surgical Portals • Glenohumeral Joint Mobility • PROM 	Goals Controlled Healing w/o infection Normal Flexion- 145 degs POS- 130 degs ER- 60 degs (@45 degs POS) IR- 40 degs (@45 degs POS)
Treatment <i>Week 0 - 2</i> 3-4 x's/day 3-4x's/day by Therapist 2-3 x's /day prn	AAROM Pulleys (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
<i>Week 2 - 4</i> 3-4 x's/day 3-4x's/day by Therapist 2-3 x's /day prn	AAROM Pulleys (Shoulder flexion) Pulleys (Shoulder POS) Pendulum Exercises (cw, ccw, flexion/extension) Supine Cane Exercise (flexion) Strengthening Wrist/Hand PRE's Scapular Retraction Isometrics --> Theraband Shoulder Isometrics (submaximal) Cardiovascular training for LE's Joint Mobilization Posterior / Inferior glides (grade I & II, for pain control) PROM - flexion, POS, ER, and light IR Modalities EMS to RTC musculature (10 on/20 off) Cold Pack/Interferential Stimulation	 x 30 reps x 30 reps x 30 reps x 15 reps/Hold 5 secs 3 x 10 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 2-3 WEEKS ***

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RTC Repair (Small) Rehabilitation Protocol
Phase 2 Weeks 4 - 8

Goals By End of Week 8	<ul style="list-style-type: none"> • Control inflammation / Pain • PROM: Flexion/POS- WNL, ER- 85 degs, IR- 50 degs • Normal glenohumeral joint mobility • Muscle Strength - 4/5 throughout shoulder musculature, except repaired tissue 3-/5 • Mild scapulohumeral rhythm imbalances 	
Evaluation	<ul style="list-style-type: none"> • Pain • Muscle Strength • Glenohumeral Joint Mobility • Scapulohumeral Rhythm • PROM 	Goals Controlled → Eliminated 4/5 MMT, except RTC- 3-/5 Normal Mild imbalance Flexion- WNL POS- WNL ER- 85 degs (@90 degs POS) IR- 50 degs (@90 degs POS)
Treatment <i>Week 4 - 6</i> 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 PRE's a) Scapular Retractions b) Scapular Protractions (serratus punch) c) Internal/External Rotation d) Plane of Scapula e) Supraspinatus f) Add UBE (if pain-free, seat on highest level, forward only) Proprioception PNF Scapular Patterns Joint Mobilization/PROM Posterior / Inferior / Anterior glides (grade III & IV - if limitations) 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 3 x 10 reps/Hold 2 secs 3 x 10 reps/Hold 2 secs 3 x 10 reps/Hold 2 secs 3 x 10 reps/Hold 2 secs 3 x 10 reps/Hold 2 secs 5 minutes 5 minutes 12 mins. 15 mins
<i>Week 6 - 8</i> 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 h) Add UBE (if pain-free, add backward direction) 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 10 minutes 5 minutes 5 minutes 15 mins

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RTC Repair (Small) Rehabilitation Protocol
Phase 3 Weeks 8 - 12

Goals By End of Week 12	<ul style="list-style-type: none"> • Eliminate Pain • AROM: WNL • Normal glenohumeral joint mobility • Muscle Strength - 5/5 throughout shoulder musculature, except repaired tissue 4-/5 • Normal scapulohumeral rhythm 	
Evaluation	<ul style="list-style-type: none"> • Pain • AROM • Muscle Strength • Glenohumeral Joint Mobility • Scapulohumeral Rhythm 	Goals Controlled → Eliminated WNL 5/5 MMT, except RTC 4-/5 Normal Normal
Treatment <i>Week 8 - 10</i> 3-4 x's/week prn	<p>Strengthening</p> <p>PRE's</p> <ul 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 h) UBE (forward / backward - 60 rpm's) i) CYBEX 6000 - RTC Strengthening (@90, 120, 180, 240 degs/sec) <p>Proprioception</p> <p>PNF GHJ (diagonal patterns w/ resistance) Closed Kinetic Chain exercises for scapular and GHJ dynamic stabilization</p> <p>Modalities</p> <p>Cold Pack</p>	<ul style="list-style-type: none"> 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 10 minutes 2 sets x 10 reps each speed <ul style="list-style-type: none"> 3 x 10 reps/ Hold 2 secs 5 minutes <p>15 mins</p>
<i>Week 10 - 12</i> 3-4 x's/week prn	<p>Strengthening</p> <p>PRE's</p> <ul 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 - 60 rpm's) k) CYBEX 6000 - RTC Strengthening (@90, 120, 180, 240 degs/sec) <p>Proprioception</p> <p>Closed Kinetic Chain exercises for scapular and GHJ dynamic stabilization</p> <p>Modalities</p> <p>Cold Pack</p>	<ul style="list-style-type: none"> 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 10 minutes 3 sets x 15 reps each speed <p>5 minutes</p> <p>15 mins</p>

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RTC Repair (Small) Rehabilitation Protocol
Phase 4 Weeks 12 +

Goals Week 16	<ul style="list-style-type: none"> • Isokinetic Muscle Strength @16 weeks 80-90% through repaired tissue • Return to Sport Specific Training Drills 	
Evaluation	<i>Reassess at 16 wks</i> <ul style="list-style-type: none"> • Clinical Examination (ROM,GHJ mob.,pain, SHR, etc.) • Isokinetic Muscle strength (Cybex 6000) 	Goals 80% - 90% of uninjured
Treatment Week 12 + 3 -4 x's/week	<i>Home/Gym Exercise Program</i> Strengthening PRE's <ol style="list-style-type: none"> CYBEX - Scapular Row Machine Scapular Protractions (serratus punch) Internal/External Rotation Plane of Scapula Supraspinatus Shoulder flexion Bicep / Tricep Latissimus Pull Shoulder Press UBE (forward / backward - 60 rpm's) CYBEX 6000 - RTC Strengthening (@90, 120, 180, 240 degs/sec) Sport Specific Exercises Proprioception Closed Kinetic Chain exercises for scapular and GHJ dynamic stabilization	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 10 minutes 3 sets x 15 reps each speed 5 minutes

Goals Week 20	<ul style="list-style-type: none"> • Isokinetic Muscle Strength @20 weeks (90% - 95% of uninjured) • Return to Sports 	
Evaluation	<i>Reassess at 20 wks</i> <ul style="list-style-type: none"> • Clinical Examination (ROM,GHJ mob.,pain, SHR, etc.) • Isokinetic Muscle strength (Cybex 6000) • Sport Specific Testing 	Goals Normal 90% - 95% of uninjured Normal for LE

Goals Week 26	<ul style="list-style-type: none"> • Isokinetic Muscle Strength @26 weeks (100% of uninjured) • Return to Sports 	
Evaluation	<i>Reassess at 26 wks</i> <ul style="list-style-type: none"> • Clinical Examination (ROM,GHJ mob.,pain, SHR, etc.) • Isokinetic Muscle strength (Cybex 6000) • Sport Specific Testing 	Goals Normal 100% of uninjured Normal for UE

RETURN TO SPORTS IF CLINICAL EXAMINATION, STRENGTH, AND SPORT SPECIFIC TESTING ARE NORMAL