## Edmonton Region Shoulder Rehabilitation Guidelines - STANDARD Arthroscopic / Mini-Open Rotator Cuff Repair

Surgery Date:	Surgeon:		Procedure / Tissue Ro	epaired:
Additional Intervention: Ad	C Resection	Biceps Tenodesis	Subscapularis Repair	Labral repair
Additional Information				

## PHASE I – Immobilization (0 – 4/6 weeks)

GOALS OF PHASE	SPECIFIC TREATMENT INTERVENTION	CRITERIA FOR PROGRESSION TO PHASE II	
Primary:     Optimize / Protect healing (musculotendionous) tissue     Decrease Pain and Inflammation  Secondary:     Protected GH joint ROM     Scapulothoracic Stabilization     Address Kinetic Chain (adjacent joints, posture, etc.)     General Health / Wellness  Cautions:     No PT assisted stretching and/or passive ROM     No specific strengthening	Primary:  Immobilization in sling/swath up to 4 weeks as dictated by surgeon/PT  Out of sling 3 – 4 times/day for washing / PT exercises /simple ADL (brushing teeth, eating, writing) if painfree  Ice/EPAas needed for pain relief Advice on sleep/rest/ positions  Secondary:  Dosage for all exercises are dictated by pain and patient being able to perform without compensation  Standing pendular ROM exercise (unweighted; ROM to dinner plate circumference only) Can add scapular retraction / protraction if able  AAROM as pain allows - flexion / scaption/extension / ER No abduction and/or hand behind back motions allowed No Active Glenohumeral Joint ROM	CRITERIA FOR PROGRESSION TO PHASE II  Tissue healing ie. no sign of abnormal / disruption to repair / adherence to immobilization  Pain significantly reduced at rest  Patient able to properly set scapula with arms at side	
or loading into GH joint rotation and/or abduction  No lifting, pushing and/or pulling with affected arm	<ul> <li>Scapular setting exercises in sitting (retraction/retraction &amp; depression)</li> <li>Shoulder in sling or supported at side in adduction/IR</li> <li>May progress to sitting on physio ball or standing</li> </ul>		
	<ul> <li>Wrist / hand / elbow ROM with shoulder in sling or supported at side in adduction/IR</li> <li>C-spine/T-spine ROM exercises (as directed by PT)</li> <li>Posture exercises (as directed by PT)</li> <li>CV exercises with shoulder in sling (recumbent stationary bike, walking)</li> </ul>		

For more information regarding these guidelines please go to:

https://www.ualberta.ca/rehabilitation/research/research-groups/shoulder-and-upper-extremity-research-group-of-edmonton/shoulder-rehabilitation-guidelines

## PHASE II - Initial Mobilization & Scapular Muscle Retraining (4/6 weeks or sling discharge – 12 weeks)

GOALS OF PHASE	SPECIFIC TREATMENT INTERVENTION	CRITERIA FOR PROGRESSION TO PHASE III
Primary:  Increase GH joint ROM (Active-Assist→Active)  Improve shoulder girdle neuromuscular strength and control  Protect healing musculotendinous tissue  Minimize shoulder pain  Secondary:  Increase functional activities (ADL)  Increased integration of kinetic chain (adjacent	Primary:  Immobilization in sling/swath discontinued  Pendular ROM exercises (unweighted; increase ROM as pain allows)  Add scapular retraction / protraction if not done in Phase I  AAROM → AROM exercises  Patient can progress to all shoulder active ROM (including abduction) when able to move through range without pain and without compensation  No PT assisted stretching beyond AROM limit / Gentle stretching into terminal ROM by patient only  Functional / U/E Kinetic Chain Exercises (wall washing, ball on the bed or wall, functional movement patterns, PNF patterns)	CRITERIA FOR PROGRESSION TO PHASE III  ROM Goals:  • Patient able to actively elevate shoulder to a minimum of 120° flexion and 40° ER  AROM achieved with minimal to no pain and with proper scapulohumeral rhythm  • Patient able to perform prescribed dosage of exercises with good technique/control and without reproducing pain and/or symptoms  • Improved strength of shoulder girdle musculature from initial assessment (outcome measure: resisted isometric testing)
joints, posture, etc.)  General Health / Wellness  Cautions:  No passive PT stretching of the shoulder unless directed by surgeon  No strengthening or loading of the shoulder through active abduction ROM plane  No lifting, pushing, or pulling with affected arm	<ul> <li>Scapular stabilization exercises (retraction / retraction &amp; depression AND protraction)         <ul> <li>Progress to arms at side, short arc/short lever dynamic movements (rowing, ball on bed ex.)</li> </ul> </li> <li>All scapular strength exercises should be performed Painfree with Proximal Stability (proper spine posture and stable scapula) and progressed only if patient can maintain this position while performing the exercise</li> <li>Closed Kinetic Chain (CKC) exercises         <ul> <li>Affected arm in flexion to scaption plane of movement only</li> <li>Eg. gentle weight-bearing onto large physio ball/table, quadruped position *all done with proper scapular positioning</li> </ul> </li> <li>Ice and EPAs as needed for pain relief</li> <li>Secondary:         <ul> <li>Continue wrist / hand / elbow / spine ROM and posture exercises as required (especially C-spine side flexion &amp; T-spine extension and rotation ROM)</li> </ul> </li> <li>Progress CV exercises (directed by PT)</li> <li>Educate/advise on appropriate and safe return to ADL activities</li> </ul>	Patient reports overall increase in use of affected arm in ADL activities and overall decrease of pain (associated mostly with use)

## PHASE III – Strengthening (12 – 24+ weeks)

GOALS OF PHASE	SPECIFIC TREATMENT INTERVENTION	CRITERIA FOR RTA / HOME PROGRAM	
<ul> <li>Full, functional ROM of GH joint and entire U/E kinetic chain</li> <li>Improve and normalize shoulder girdle neuromuscular strength, endurance &amp; proprioception</li> <li>Secondary:         <ul> <li>Full return to all ADLs, work and recreational activities</li> <li>Protect healing musculotendinous tissue</li> </ul> </li> <li>Cautions:         <ul> <li>Strengthening in positions that encourage impingement (i.e. poor scapular positioning, long lever exercises, abduction ROM)</li> <li>Lifting, pushing, pulling of affected arm</li> <li>Overhead activities</li> </ul> </li> </ul>	<ul> <li>Primary:</li> <li>Range of Motion / Stretching</li> <li>Continue AROM – focus on combined, functional ROM</li> <li>May begin PT assisted stretching as required</li> <li>Joint mobilization techniques as required</li> <li>Posterior capsule and/or pectoralis minor stretching as required</li> <li>Shoulder Girdle Strengthening (emphasis on scapular stabilizers and rotator cuff)</li> <li>Begin with isometrics → isometrics in varied positions → isotonics</li> <li>Begin with flexion, scaption planes of movement → progress to abduction with low load and short lever arm only</li> <li>Begin with shoulder in neutral at side then gradually progress to performing exercises at waist level, shoulder level, etc.</li> <li>Progress to combined, functional movement patterns vs. isolated movements</li> <li>Dosage should reflect strength &amp; endurance goals</li> <li>Avoid long lever positions for all strength exercises</li> <li>All exercise progressions based on patient being able to perform prescribed dosage with good technique (ie. scapular control) AND without reproducing pain and/or other symptoms</li> <li>Functional/U/E Kinetic Chain Exercises         <ul> <li>Progress from Phase II - dosage, ROM, functional positions, speed, reaction time, L/E challenge</li> </ul> </li> <li>Closed Kinetic Chain exercises (as in Phase II)</li> <li>Progress by increasing weight bearing through U/E, adding perturbations, endurance, functional positions, etc.</li> <li>All kinetic chain exercises should be performed Painfree with Proximal Stability (proper spine posture and stable scapula) and progressed only if patient can maintain this position while performing the exercise</li> <li>cincluding advise on weight training exercises – avoid all long lever exercises and exercises such as dips, chin ups, or any exercise that places the arm/elbow behind the plane of the body</li> <li>Advise on maintaining or increasing CV fitness</li> </ul>	<ul> <li>Full, functional GH joint AROM AROM should be painfree and performed with proper scapulohumeral rhythm</li> <li>Improved strength and endurance of shoulder girdle musculature (compared to beginning of Phase III)</li> <li>Patient able to demonstrate proper scapular control with dynamic testing (ie. GH joint ROM and/or functional movement pattern)</li> <li>Patient able to use affected arm in most to all ADL activities</li> <li>Return to heavy work/sport at 6 months (throwing at 6 – 8 months) as directed by surgeon &amp; PT</li> </ul>	