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

Surgery Date:________________ **Surgeon:**______________________ **Procedure / Tissue Repaired:** __________________________________

Additional Intervention: AC 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 or loading into GH joint rotation and/or abduction**
• **No lifting, pushing and/or pulling with affected arm**
	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)
	  o 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
	
	• Scapular setting exercises in sitting (retraction/retraction & depression)
	  • Shoulder in sling or supported at side in adduction/IR
	  • May progress to sitting on physio ball or standing
	
	• Wrist / hand / elbow ROM with shoulder in sling or supported at side in adduction/IR
	• C-spine/T-spine ROM exercises (as directed by PT)
	• Posture exercises (as directed by PT)
	
	• CV exercises with shoulder in sling (recumbent stationary bike, walking)
		• 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

For more information regarding these guidelines please go to:

http://www.rehabilitation.ualberta.ca/en/ContinuingProfessionalEducation/ShoulderRehab.aspx

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 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**
	Primary:
	• Immobilization in sling/swath discontinued
	
	• Pendular ROM exercises (unweighted; increase ROM as pain allows)
	    o 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)
	
	• Scapular stabilization exercises (retraction / retraction & depression AND protraction)
	    • Progress to arms at side, short arc/short lever dynamic movements (rowing, ball on bed ex.)
	
	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
	
	• Closed Kinetic Chain (CKC) exercises
	    o Affected arm in flexion to scaption plane of movement only
	    o Eg. gentle weight-bearing onto large physio ball/table, quadruped position *all done with proper scapular positioning
	
	• Ice and EPAs as needed for pain relief
	
	Secondary:
	• Continue wrist / hand / elbow / spine ROM and posture exercises as required (especially C-spine side flexion & T-spine extension and rotation ROM)
	
	• Progress CV exercises (directed by PT)
	• Educate/advise on appropriate and safe return to ADL activities
		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)
		
		• 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

Primary:
• Full, functional ROM of GH joint and entire U/E kinetic chain
• Improve and normalize shoulder girdle neuromuscular strength, endurance & proprioception
 	
Secondary:
• Full return to all ADLs, work and recreational activities
• Protect healing musculotendinous tissue
 	
Cautions:
• **Strengthening in positions that encourage impingement (i.e. poor scapular positioning, long lever exercises, abduction ROM)**
• **Lifting, pushing, pulling of affected arm**
• **Overhead activities**
	Primary:
	• Range of Motion / Stretching
	  • Continue AROM – focus on combined, functional ROM
	  • May begin PT assisted stretching as required
	  • Joint mobilization techniques as required
	  • Posterior capsule and/or pectoralis minor stretching as required
	
	• Shoulder Girdle Strengthening (emphasis on scapular stabilizers and rotator cuff)
	  • Begin with isometrics→isometrics in varied positions→isotonics
	  • Begin with flexion, scaption planes of movement→progress to abduction with low load and short lever arm only
	  • Begin with shoulder in neutral at side then gradually progress to performing exercises at waist level, shoulder level, etc.
	  • Progress to combined, functional movement patterns vs. isolated movements
	  • Dosage should reflect strength & endurance goals
	  • **Avoid long lever positions for all strength exercises**
	
	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
	
	• Functional/U/E Kinetic Chain Exercises
	    o Progress from Phase II - dosage, ROM, functional positions, speed, reaction time, L/E challenge
	• Closed Kinetic Chain exercises (as in Phase II)
	  • Progress by increasing weight bearing through U/E, adding perturbations, endurance, functional positions, etc.
	
	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
	
	Secondary:
	• Activity-specific exercises to address functional goals for returning to ADL/work/recreational activities
	    o including 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
	• Advise on maintaining or increasing CV fitness
		• Full, functional GH joint AROM **AROM should be painfree and performed with proper scapulohumeral rhythm**
		
		• Improved strength and endurance of shoulder girdle musculature (compared to beginning of Phase III)
		
		• Patient able to demonstrate proper scapular control with dynamic testing (ie. GH joint ROM and/or functional movement pattern)
		
		• Patient able to use affected arm in most to all ADL activities
		
		• Return to heavy work/sport at 6 months (throwing at 6 – 8 months) as directed by surgeon & PT