

Orthopedic Surgery, Sports Medicine & Arthroscopy Specialists

Jonathan Watson, MD REHABILITATION PROTOCOL- Distal triceps tendon repair

The rehabilitation guidelines are presented in a criterion based progression program. General time frames are given for reference to the average, but individual patients will progress at different rates depending on their age, associated injuries, pre-injury health status, rehab compliance, tissue quality and injury severity. Specific time frames, restrictions, and precautions may also be given to protect healing tissues and the surgical repair/reconstruction. It should not be a substitute for one's clinical decision making regarding the progression of a patient's post-operative course based on their physical exam findings, individual progress, and/or the presence of post-operative complications. The therapist should consult the referring physician with any questions or concerns.

Special attention must be given to impairments that caused the initial problem. For example, if the patient is s/p partial medial meniscectomy and they have a varus alignment, post-operative rehabilitation should include correcting muscle imbalances or postures that create medial compartment stress.

INDIVIDUAL CONSIDERATIONS: S/p

PHASE 1- Surgery to 2 weeks

DELIAD COALS	1. Protection of the post-surgical repair
REHAB GOALS	
	2. Avoid contracture
	3. Minimize swelling, pain & inflammation
PRECAUTIONS	1. Minimize activities that stress elbow flexors and supinators
	2. splint with elbow immobilized neutral rotation until first
	postoperative visit.
	3. Hinged elbow brace placed after splint removed, 0-45 degrees, locked
	at 30 deg initially.
	4. Avoid excessive shoulder flexion
	5. Cryocuff 3-5 times per day for 20 minutes and ice after every therapy
	session after splint removed
RANGE OF	 Codman exercises
MOTION	 Shoulder passive ROM
	 Elbow passive extension & pronation. Active/active assist elbow
EXERCISES	flexion/supination
	 Passive wrist and hand ROM
SUGGESTED	Sub maximal pain free shoulder & biceps isometrics
THERAPEUTIC	 Week 2- sub maximal pain free triceps isometrics (forearm
	neutral)
EXERCISES	

CARDIOVASCULAR	Stationary bike when splint removed with brace on. No gripping
EXERCISE	handle with operative arm
PROGRESSION	Minimal pain & swelling
CRITERIA	Wound healing

PHASE 2-3-6weeks

REHAB GOALS	1. Protection of the post-surgical repair
	2. Continue activity modification (non weight bearing operative arm)
	3. Avoid painful exercises
	4. Minimize pain and swelling
PRECAUTIONS	Avoid gripping, lifting, carrying items with operative arm
	2. Hinged elbow brace at all times except bathing/PT
	3. See below for ROM restrictions
	4. Cryocuff 3-5 times per day for 20 minutes and ice after every therapy
	session
RANGE OF	Week 3-Active assist elbow flexion & supination (elbow extended) Active assist Elbow POM, Week 3: 0.45 dec. Week 4: 0.60 dec.
MOTION	 Active assist Elbow ROM- Week 3: 0-45 deg, Week 4: 0-60 deg, Week 5: 0-80 deg, Week 6- 0-90 deg
EXERCISES	AROM of shoulder, wrist, hand
	Passive elbow extension & pronation
SUGGESTED	As above
THERAPEUTIC	Week 6- putty for grip strength
EXERCISES	
CARDIOVASCULAR	Stationary bike without gripping of handle with operative arm
EXERCISE	
PROGRESSION	Minimal pain & swelling
CRITERIA	 Full elbow flexion and lacking <10 deg of extension

PHASE 3-7-10 weeks postop

REHAB GOALS	 Protect surgical repair
	 No pain with ADLs
	o Full ROM
	 Begin to restore Shoulder, scapular, elbow & forearm strength
PRECAUTIONS	 Avoid gripping, carrying items with operative arm
	 Hinge elbow brace- week 7: 0-115 deg, week 8: 0-125 deg
RANGE OF	 Continue exercises from phase 2.
MOTION	 Can start combination motions (e.g. extension with pronation)
	 If patient has not achieved full ROM by week 8 discuss with
EXERCISES	surgeon

	Week 8- passive elbow flexion
SUGGESTED THERAPEUTIC EXERCISES	 Sport specific core & lower extremity strengthening. Avoid holding heavy weights in hands Week 7-supine scapular stabilization without weight Week 8- Strengthening elbow flexion, extension, forearm rotation, wrist flexion & extension with tubing/1kg weights Week 8- Shoulder theraband, supine scapular stabilization with 1kg weight
CARDIOVASCULAR	Stationary bike, avoid gripping handle
EXERCISE	
PROGRESSION CRITERIA	 Full elbow ROM Pain free w/exercises & ADLs Shoulder ROM equal to contralateral

PHASE 4-11-14 weeks postop

REHAB GOALS	 Begin elbow strengthening program
	 Restore shoulder & forearm flexibility
	 Minimize pain and swelling
PRECAUTIONS	Post-activity soreness should resolve within 24 hours
	Avoid post activity swelling
RANGE OF	 Continue with flexibility exercises from previous phase
MOTION	Forearm and shoulder stretching, avoid excessive shoulder flexion
EXERCISES	until week 12
EXERCISES	
SUGGESTED	 Progress phase 3 activities with resistance/weight
THERAPEUTIC	Progress rotator cuff strengthening to 90 deg internal & external
EXERCISES	position
LALICISES	Begin triceps specific exercises
	 Week 12- ok to start light upper extremity weight training
	 Progress core/lower extremity exercises
CARDIOVASCULAR	Progress to upper body ergometry at week 12
EXERCISE	
PROGRESSION	 No pain or swelling
CRITERIA	 Full range of motion

PHASE 5-15+ weeks

REHAB GOALS	 Restore normal neuromuscular function
	 Begin sport/work specific activities without pain

	 Restore full strength, ROM, endurance
	 Return to sport/work: may be 6-9 mos before strength returns
PRECAUTIONS	 Post-activity soreness should resolve within 24 hours
RANGE OF	 Continue with flexibility exercises
MOTION	 Lower extremity flexibility per sport
EXERCISES	
EXERCISES	
SUGGESTED	 Progress strengthening from phase 4
THERAPEUTIC	 Implement sport/work specific exercises and progress as tolerated
EXERCISES	
	Continue to progress from phase 4
CARDIOVASCULAR	 Continue to progress from phase 4.
EXERCISE	
PROGRESSION	 Normal grip strength
CRITERIA- RETURN	 Normal upper extremity flexibility, strength, power, endurance
	 Completion of sport/work specific program
TO SPORT	 Elbow extension & pronation 90% of contralateral side