

Orthopedic Surgery, Sports Medicine & Arthroscopy Specialists

# Jonathan Watson, MD REHABILITATION PROTOCOL- Clavicle ORIF

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 6 weeks

REHAB GOALS	1. Protection of the post-surgical repair
	2. Emphasize importance of sling usage
	3. Minimize swelling & pain
PRECAUTIONS	<ol> <li>Sling immobilization for 6 weeks, use at all times except bathing &amp; ROM exercises</li> <li>ROM precautions: 90 flexion, IR &amp; ER 45. Week 3 can increase flexion to 120, IR &amp; ER as tolerated. No active ROM</li> <li>Cryocuff 3-5 times per day for 20 minutes and ice after every therapy session</li> <li>No lifting or carrying objects with operative arm</li> </ol>
RANGE OF	<ul> <li>Active &amp; passive wrist, hand ROM, ball squeeze, gripping</li> </ul>
MOTION	Supported Codman exercises
EXERCISES	<ul> <li>Supine Range of motion</li> </ul>
SUGGESTED	o As above
THERAPEUTIC	<ul> <li>Week 2- LE and core strengthening with sling on at all times</li> </ul>
EXERCISES	Isometrics ER & IR at neutral
LALINCIDLD	Scapular retraction
CARDIOVASCULAR	Stationary bike at week 3 while wearing sling at all times
EXERCISE	
PROGRESSION	<ul> <li>Minimal/no pain</li> </ul>
	<ul> <li>100% sling compliance</li> </ul>

CRITERIA	0	No signs of repair failure
	0	Wound healing

#### PHASE 2- 7-12 weeks

REHAB GOALS	1. Protection of the post-surgical repair
	2. Prevent contracture
	3. Minimize pain and swelling
PRECAUTIONS	1. ROM precautions: none.
	2. Cryocuff 3-5 times per day for 20 minutes and ice after every therapy
	session once splint removed
	3. No lifting or carrying objects more than 5 lbs.
RANGE OF	Continue phase 1 exercises
MOTION	Glenohumeral/scapular mobilizations as needed
EXERCISES	
LALICISES	
SUGGESTED	Continue phase 1 exercises
THERAPEUTIC	Core & hip isometrics     Higher level athletes may begin single LE belongs with bead.
EXERCISES	<ul> <li>Higher level athletes may begin single LE balance with head movements, functional 1/3 squats, step ups/downs and stationary</li> </ul>
	lunges
	Theraband ER & IR, rows, serratus punch
	o Prone- rows, extension, T's, Y's
	o Scaption
	o Biceps curl
	Week 8- wall pushups
CARDIOVASCULAR	Stationary bike
EXERCISE	
PROGRESSION	No swelling or pain. No signs of repair failure
CRITERIA	o Full passive ROM
J	Normal glenohumeral & scapulothoracic mechanics

## PHASE 3-13-18 weeks postop

REHAB GOALS	<ul> <li>Protect surgical repair</li> </ul>	
	<ul> <li>Improve scapular, cuff strength</li> </ul>	
	<ul> <li>Normalize trunk &amp; kinetic chain</li> </ul>	
PRECAUTIONS	<ul> <li>Avoid overhead lifting</li> </ul>	
RANGE OF	<ul> <li>Continue exercises from phase 2.</li> </ul>	
MOTION	<ul> <li>Mobilizations as needed</li> </ul>	
EXERCISES		

SUGGESTED THERAPEUTIC EXERCISES	<ul> <li>Continue exercises from phase 2</li> <li>LE - progress strengthening. No power clean/dead lift/back squats</li> <li>Add seated rows, bicep curls</li> <li>Progress pushups</li> <li>Rhythmic stabilization</li> </ul>
CARDIOVASCULAR	Week 12- walk/jog/run progression
EXERCISE	
PROGRESSION	o Fracture healing
CRITERIA	<ul> <li>No pain/swelling</li> </ul>
	<ul> <li>Normal glenohumeral &amp; scapulothoracic mechanics</li> </ul>

# PHASE 4-19+ weeks postop

REHAB GOALS	Return to sport
PRECAUTIONS	Post-activity soreness should resolve within 24 hours
RANGE OF	<ul> <li>Avoid post activity swelling</li> <li>Continue with flexibility exercises from previous phase</li> <li>Gentle end range stretching</li> </ul>
MOTION EXERCISES	<ul> <li>LE and core flexibility</li> <li>Mobilizations as needed</li> </ul>
SUGGESTED THERAPEUTIC EXERCISES	<ul> <li>Continue phase 3 activities. Progress with resistance/load.</li> <li>Throwers/overhead athletes- plyometric program (rebounders with arm at side, wall dribbles, deceleration with weighted ball</li> </ul>
CARDIOVASCULAR	Continue and progress
EXERCISE	
PROGRESSION	Normal kinematics of GH & ST joints
CRITERIA	<ul><li>Full painless active &amp; passive ROM</li><li>Strength 90% contralateral</li></ul>