



Orthopedic Surgery, Sports Medicine & Arthroscopy Specialists

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REHABILITATION PROTOCOL- Proximal Humerus 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	<ol style="list-style-type: none"> 1. Protection of the post-surgical repair 2. Emphasize importance of sling usage 3. Minimize swelling & pain
PRECAUTIONS	<ol style="list-style-type: none"> 1. Sling immobilization for 6 weeks, use at all times except bathing & ROM exercises 2. ROM precautions: Flexion 130, ER 30. No active ROM. Week 4- progress flexion and ER 3. Cryocuff 3-5 times per day for 20 minutes and ice after every therapy session 4. No lifting or carrying objects with operative arm
RANGE OF MOTION EXERCISES	<ul style="list-style-type: none"> ○ Active & passive wrist, hand ROM, ball squeeze, gripping ○ Supported Codman exercises ○ Supine Range of motion ○ Week 3- active assist ROM
SUGGESTED THERAPEUTIC EXERCISES	<ul style="list-style-type: none"> ○ As above ○ Week 3- LE and core strengthening with sling on at all times ○ Week 3- Bicep & tricep isotonic Deltoid isotonic in plane of scapula. Scapular stabilization ○ Week 4- ER, IR isometrics, table slides, serratus punch
CARDIOVASCULAR EXERCISE	Stationary bike at week 3 while wearing sling at all times

PROGRESSION CRITERIA	<ul style="list-style-type: none"> ○ Minimal/no pain ○ 100% sling compliance ○ No signs of repair failure ○ Wound healing
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PHASE 2- 7-12 weeks

REHAB GOALS	<ol style="list-style-type: none"> 1. Protection of the post-surgical repair 2. Prevent contracture 3. Minimize pain and swelling
PRECAUTIONS	<ol style="list-style-type: none"> 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 2 lbs.
RANGE OF MOTION EXERCISES	<ul style="list-style-type: none"> ○ Continue phase 1 exercises ○ Glenohumeral/scapular mobilizations as needed ○ Progress to active ROM
SUGGESTED THERAPEUTIC EXERCISES	<ul style="list-style-type: none"> ○ Continue phase 1 exercises ○ Core & hip isometrics ○ Higher level athletes may begin single LE balance with head movements, functional 1/3 squats, step ups/downs and stationary lunges ○ Week 8- Theraband ER & IR, flexion, abduction, extension ○ Week 8- biceps & triceps
CARDIOVASCULAR EXERCISE	Stationary bike , upper body ergometer no resistance
PROGRESSION CRITERIA	<ul style="list-style-type: none"> ○ No swelling or pain. No signs of repair failure ○ Full passive ROM ○ Normal glenohumeral & scapulothoracic mechanics

PHASE 3- 13-18 weeks postop

REHAB GOALS	<ul style="list-style-type: none"> ○ Protect surgical repair ○ Improve scapular, cuff strength ○ Normalize trunk & kinetic chain
PRECAUTIONS	<ul style="list-style-type: none"> ○ Avoid overhead lifting
RANGE OF MOTION EXERCISES	<ul style="list-style-type: none"> ○ Continue exercises from phase 2. ○ Mobilizations as needed

SUGGESTED THERAPEUTIC EXERCISES	<ul style="list-style-type: none"> ○ Continue exercises from phase 2 ○ LE - progress strengthening. No power clean/dead lift/back squats ○ Progress upper body activity with weight/resistance
CARDIOVASCULAR EXERCISE	Week 12- walk/jog/run progression
PROGRESSION CRITERIA	<ul style="list-style-type: none"> ○ Fracture healing ○ No pain/swelling ○ Normal glenohumeral & scapulothoracic mechanics

PHASE 4- 19+ weeks postop

REHAB GOALS	<ul style="list-style-type: none"> ○ Return to sport
PRECAUTIONS	<p>Post-activity soreness should resolve within 24 hours</p> <p>Avoid post activity swelling</p>
RANGE OF MOTION EXERCISES	<ul style="list-style-type: none"> ○ Continue with flexibility exercises from previous phase ○ Gentle end range stretching ○ LE and core flexibility ○ Mobilizations as needed
SUGGESTED THERAPEUTIC EXERCISES	<ul style="list-style-type: none"> ○ Continue phase 3 activities. Progress with resistance/load. ○ Throwers/overhead athletes- plyometric program (rebounders with arm at side, wall dribbles, deceleration with weighted ball)
CARDIOVASCULAR EXERCISE	Continue and progress
PROGRESSION CRITERIA	<ul style="list-style-type: none"> ○ Normal kinematics of GH & ST joints ○ Full painless active & passive ROM ○ Strength 90% contralateral