Mayo Clinic in Florida



Orthopedics and Sports Medicine

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## **Pectoralis Major Repair Rehabilitation Protocol**

Phase	Goals	Precautions / Restrictions	Treatment
Weeks 0 – 6	<ul> <li>Protect surgical site and maintain repair integrity</li> <li>Decrease pain and inflammation</li> <li>PRICE principles</li> <li>Improve Scapular Mechanics</li> <li>No shoulder range of motion x 4 weeks</li> <li>→ Initiate PROM</li> </ul>	<ul> <li>No shoulder motion x 4 weeks</li> <li>Wear immobilizer with pillow except for hygiene and exercise performance x <u>6 weeks</u></li> <li>No lifting on any object on operative side</li> <li>No lifting greater than 5 lbs. on uninvolved side</li> <li>No pushing / pulling greater than 20 lbs. on uninvolved side</li> </ul>	<ul> <li>Active-assisted range of motion of elbow, wrist and hand with arm in plane of body</li> <li>Scapular retraction isometrics</li> <li>Week 2 – 3: Core activation with immobilizer <ul> <li>May Initiate stationary bike with no use of handlebars on operative arm</li> </ul> </li> <li>Week 4: Begin Passive shoulder ROM <ul> <li>Shoulder Hangs + Codman's (Pendulum) exercise</li> <li>Limit Supine Forward Flexion to 90° and ER to 30°</li> </ul> </li> <li>Initial visit: FOTO PRO, QuickDASH</li> </ul>
Weeks 6 – 12	<ul> <li>Maintain integrity of repair</li> <li>Progress PROM and slowly advance to AAROM + AROM</li> <li>Goals at Week 12: <ul> <li>135° Flexion</li> <li>120° Abduction</li> <li>Full External Rotation</li> <li>NI scapular mechanics</li> </ul> </li> <li>Initiate muscle activation</li> <li>Improve motor control</li> </ul>	<ul> <li>Wean out of sling as able</li> <li>Do not force motion or weight bear through the involved shoulder</li> <li>Week 9 ROM Limits: <ul> <li>No Internal Rotation behind back</li> <li>No Abduction beyond 60°</li> <li>No External Rotation in a neutral position beyond 45°</li> </ul> </li> <li>No ER in an Abducted Position <ul> <li>No Resisted IR or Adduction</li> </ul> </li> </ul>	<ul> <li>Week 6: Progress PROM → Advance AAROM</li> <li>Week 8: AROM initiated once AAROM achieved</li> <li>Week 8: Core / LE training <ul> <li>Balance / Proprioception, Single + Multiplane</li> </ul> </li> <li>Week 9: Initiate Isometric Strengthening <ul> <li>all Below the Horizontal Plane</li> <li>Scapular stabilizers and Rotator Cuff</li> <li>Biceps, Triceps</li> </ul> </li> <li>Continue with stationary bike up to 30 minutes</li> <li>Week 6: FOTO, QuickDASH</li> </ul>
Weeks	<ul> <li>Maintain integrity of repair</li> </ul>	<ul> <li>Do not force motion</li> </ul>	Week 12: Cycling and Running Permitted
12 - 16 (Months 3 - 4)	<ul> <li>Progress RTC and scapular stabilizer strengthening</li> <li>Full AROM compared bilaterally w/o compensation</li> <li>Initiate Push-up progression with no elbow flexion &gt; 90°: Wall → Table → Chair</li> </ul>	<ul> <li>No weight bearing through involved shoulder</li> <li>Very Light Resistive Weight Training         <ul> <li>10 lb. Weightlifting restriction</li> <li>No Pec Flys, Bench press, or Pull downs</li> </ul> </li> </ul>	<ul> <li>Light TheraBand – Add IR, Adduction, Flexion</li> <li>Muscle endurance on upper body ergometer</li> <li>FOTO, QuickDASH</li> <li>Advancement to isotonic exercise per tolerance in all planes, including multiplane exercises as long as:</li> <li>Isometrics are progressing</li> <li>No compensations during exercise performance</li> </ul>
Weeks 16 - 24 (Months 4 - 6)	<ul> <li>Address any remaining asymmetries in strength, endurance and movement patterns</li> <li>Initiation of power</li> </ul>	<ul> <li>Begin loading through shoulder and initiate push-ups and bench press</li> <li>Avoid aggravation of repair</li> <li>20 lb. weightlifting restriction until week 20 → Slowly progress along if</li> </ul>	<ul> <li>Week 16: Continue multiplane strengthening         <ul> <li>FOTO, QuickDASH, HHD testing</li> <li>Advance balance / proprioception</li> <li>Continue Aerobic and Anaerobic Interval training</li> </ul> </li> <li>Week 20: Initiate Plyometric and Sports Program</li> </ul>
Weeks 24 + (Months 6+)	<ul> <li>development in athletes</li> <li>Initiate return to strenuous work and sport progression</li> <li>Low level sport specific activity → Progress to higher demand activity as long as:         <ul> <li>Full non-painful ROM</li> <li>Satisfactory stability</li> <li>Satisfactory isokinetics</li> <li>No pain with lifting</li> </ul> </li> </ul>	<ul> <li>painless</li> <li>Initiate bench press strengthening at 50% pre op 1 rep max or less focusing on multiple reps</li> <li>Focus on form and control during exercise performance with appropriate work rest intervals</li> <li>Assess tolerance to activity during, after and at 24 hours after activity</li> </ul>	<ul> <li>Home Exercise Program - 3 - 5 x a day</li> <li>Continue with Anaerobic + Aerobic interval training</li> <li>Continue with core stability per tolerance <ul> <li>Stability in all 3 planes of motion</li> <li>Sport specific movements</li> </ul> </li> <li>Plyometric activities progressing from simple to complex, less load to more load</li> <li>Week 24: QuickDASH, FOTO, HHD / Isokinetics</li> </ul>

This protocol is not meant to be prescriptive but a recommendation to guide the rehabilitation process. Each patient's progress may vary based on specifics of their injury and procedure.

