

# Clavicle Repair

Rehab Protocol  
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## PHASE 1: Generally 0-6 Weeks Post-Op

<b>GOALS:</b>	1) Control pain and swelling 2) Protect surgical repair 3) Normal shoulder ROM															
<b>PRECAUTIONS:</b>	- Sling full-time for 3 weeks, wean by 6 weeks post-surgery - <b>No</b> horizontal adduction - <b>Avoid</b> IR behind the back - <b>No</b> lifting greater than 1-2lbs for 3 weeks - <b>No</b> running or high-impact activity for aerobic training <table border="1" data-bbox="609 821 1414 982"> <thead> <tr> <th>Week</th> <th>Forward Flexion</th> <th>ER in Scaption</th> <th>IR in Scaption</th> <th>Abduction</th> </tr> </thead> <tbody> <tr> <td>Week 1-2</td> <td>≤90</td> <td>≤60</td> <td>≤60</td> <td>≤90</td> </tr> <tr> <td>Week 3-6</td> <td>≤120</td> <td></td> <td></td> <td>≤120</td> </tr> </tbody> </table>	Week	Forward Flexion	ER in Scaption	IR in Scaption	Abduction	Week 1-2	≤90	≤60	≤60	≤90	Week 3-6	≤120			≤120
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<b>WOUND CARE:</b>	- Post-op dressing removed at PT eval - Shower at post-op day #3 - Submerge in water after wound is fully healed - Suture removal @ 7-14 days post-op by Ortho															
<b>MODALITIES:</b>	- Cryotherapy <ul style="list-style-type: none"> <li>Hourly for 15 minutes for the first 24 hours after sensation is restored from nerve block</li> <li>Continue use until acute inflammation is controlled</li> <li>Once controlled, use 4-5x per day for 15 minutes or longer as tolerated</li> </ul> - Soft tissue mobilization and other integrative medicine techniques <ul style="list-style-type: none"> <li>Soft tissues/trigger point work to the kinetic chain (i.e. cervical spine, scapular, and forearm)</li> </ul>															
<b>REHABILITATION:</b>	- Frequent use of cryotherapy and/or ice - Begin scar massage after incision site has healed and scar is formed - Consider dry needling with avoidance of incision sites (discuss with Ortho) - Consider blood flow restriction (BFR) on uninvolved arm or LE for physiological benefits at 1-2 weeks from surgery - As tolerated, progress rehabilitation exercises as wound healing occurs and the inflammatory response decreases															
~ Weeks 1-6	- ROM exercises: <ul style="list-style-type: none"> <li>Shoulder PROM/AAROM within above ROM guidelines in non-impingement position (i.e. hammer grip)</li> <li>Scapular mobilizations</li> </ul>															

	<ul style="list-style-type: none"> <li>Modified pendulums in sling; progress to full pendulums after 3-5 days</li> </ul> <p>- Strengthening:</p> <ul style="list-style-type: none"> <li>Ball squeezing exercises</li> <li>Elbow/wrist AROM and grip strengthening with shoulder in neutral position at side</li> <li>Gentle submaximal ("2-finger") shoulder isometrics</li> <li>Scapular retraction</li> <li>BFR (elbow FLEX/EXT) on uninvolved arm or LE</li> </ul> <p>- Cardiovascular training:</p> <ul style="list-style-type: none"> <li>Recumbent bike while wearing sling</li> </ul>
<b>FOLLOW-UP:</b>	<p>-Supervised rehabilitation: 1-2x per week</p> <p>-PT re-evaluation: 2 weeks &amp; 4 weeks</p> <p>-Orthopedic re-evaluation: 2 weeks and 6 weeks post-operatively</p>

<b>PHASE 2: Generally 7-12 Weeks Post-Op</b>	
<b>GOALS:</b>	<ol style="list-style-type: none"> <li>1) D/C Sling</li> <li>2) Achieve full shoulder ROM</li> <li>3) Minimize shoulder pain</li> <li>4) Begin to increase strength and endurance</li> <li>5) Increase functional activities</li> </ol>
<b>PRECAUTIONS:</b>	<p>- <b>DO NOT</b> lift objects heavier than 1 or 2 pounds</p> <p>- <b>NO</b> forceful pushing or pulling: push-ups, bench press, pec flies, throwing, or overhead activities</p> <p>- <b>NO</b> running or high-impact activity for aerobic training</p>
<b>REHABILITATION:</b>	<p>-Continue Phase I exercises as needed</p> <p>-Progress to the following exercises and increase intensity gradually when patient is ready (i.e. no increase in shoulder pain or effusion since the previous exercise session)</p>
~ Weeks 7-12	<p>- Increase functional activities</p> <p>- Initiate IR/ER stretches at 90°</p> <p>- Trunk stabilization (NWB)</p> <p>- Scapular strengthening emphasizing scapular retractors and upward rotators</p> <p>- Shoulder strength and endurance progression: IR, ER, Rows &amp; Serratus Anterior</p> <ul style="list-style-type: none"> <li>Continue base strengthening/isometrics as needed</li> <li>PREs</li> </ul> <p>- Proprioception drills</p> <p>- Rhythmic stabilization</p> <p>- Initiate push-up progression starting at wall at week 8</p> <p>- Cardiovascular training: continue recumbent bike; progress to elliptical (no push/pull with surgical arm) and/or treadmill walking</p> <p>- Adjunct treatments to consider: BFR on involved arm for AROM and isometric activities, dry needling, cervicothoracic manual therapy, aquatic walking with water at chest level or below (no UE movement or resistance; no swimming)</p>
<b>FOLLOW-UP:</b>	<p>- Supervised rehabilitation: 2-3x per week</p> <p>- PT re-evaluation: 8 &amp; 12 weeks</p> <p>- Orthopedic re-evaluation: 12 weeks post-operatively</p>
<b>CRITERIA FOR PROGRESSION:</b>	<p>- Pain-free ROM within stated goals</p>

	<ul style="list-style-type: none"> <li>- Achieve ROM goals to normalize AROM/PROM</li> <li>- Normal/near-normal scapular stabilization and coordination</li> </ul>
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<b>PHASE 3: Generally 13-18 Weeks Post-Op</b>	
<b>GOALS:</b>	<ol style="list-style-type: none"> <li>1) Normalize AROM/PROM</li> <li>2) Normalize strength, endurance, neuromuscular control, and power</li> <li>3) Perform functional and kinesiological assessment (i.e. FMS)</li> <li>4) Perform initial functional testing</li> </ol>
<b>PRECAUTIONS:</b>	<ul style="list-style-type: none"> <li>- <b>Avoid</b> overhead lifting</li> <li>- <b>No</b> bench press until after ~16 weeks</li> </ul>
<b>REHABILITATION:</b>	<ul style="list-style-type: none"> <li>-Continue Phase II exercises as needed</li> <li>-Progress to the following exercises and increase intensity gradually when patient is ready (i.e. no increase in knee pain or effusion since the previous exercise session)</li> </ul>
~ Weeks 13-18	<ul style="list-style-type: none"> <li>- AROM/AAROM</li> <li>- ER at 90° abduction stretch, sleeper stretch, behind back IR</li> <li>- Theraband progressive resistive exercises: IR,ER, dynamic hug, bicep curl</li> <li>- Prone I's, Y's, T's</li> <li>- Sidelying shoulder ER</li> <li>- Initiate UBE below shoulder level</li> <li>- Continued proprioceptive training</li> <li>- Continue push up progression</li> </ul>
<b>FOLLOW-UP:</b>	<ul style="list-style-type: none"> <li>- Supervised rehabilitation: 1-2x per week</li> <li>- PT re-evaluation: monthly</li> <li>- Orthopedic re-evaluation: 6 months post-operatively</li> </ul>
<b>TESTING:</b>	<ul style="list-style-type: none"> <li>-Closed Kinetic Chain Upper Extremity Stability Test [CKQUEST]</li> <li>-Upper Quarter Y-Balance Test</li> </ul>

<b>PHASE 4: Generally 19-28 Weeks Post-Op</b>	
<b>GOALS:</b>	<ol style="list-style-type: none"> <li>1) Maintain full ROM</li> <li>2) Continue strengthening progression</li> <li>3) Protect the surgical repair</li> <li>4) Return to sport-specific training/practice</li> </ol>
<b>PRECAUTIONS:</b>	Weight Training to be initiated based on surgical clearance
<b>REHABILITATION:</b>	<ul style="list-style-type: none"> <li>-Continue Phase III exercises as needed</li> <li>-Progress to the following exercises and increase intensity gradually when patient is ready (i.e. no increase in knee pain or effusion since the previous exercise session)</li> </ul>
~ Weeks 19-28	<ul style="list-style-type: none"> <li>- 'Rebounder' throws: arm at side and then progress</li> <li>- Wall dribbles at 90° <ul style="list-style-type: none"> <li>• Circles</li> <li>• Overhead</li> </ul> </li> </ul>
<b>FOLLOW-UP:</b>	<ul style="list-style-type: none"> <li>- Supervised rehabilitation: 1-2x per week</li> <li>- PT re-evaluation: monthly</li> <li>- Orthopedic re-evaluation: 6 months post-operatively</li> </ul>
<b>TESTING:</b>	<ul style="list-style-type: none"> <li>-Closed Kinetic Chain Upper Extremity Stability Test [CKQUEST]</li> <li>-Upper Quarter Y-Balance Test</li> </ul>
<b>MISCELLANEOUS:</b>	After 6 months post-op, exercises in Phase III are continued, gradually increasing intensity and duration as needed based on patient specific limitations and sport specific activities.

	The recommendation is to wait until 6 months post-op to return to contact/collision sports or aggressive military training. This time period may be adjusted slightly by the surgeon and therapist according to patient progress and functional outcomes.
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These guidelines were created as a framework for the post-operative rehabilitation program. They DO NOT substitute for any specific restrictions or requirements that are determined through the necessary shared decision-making and collaboration between the operating surgeon and treating rehabilitation team.