

## **Complex Meniscal Repair Rehabilitation Guideline**

Individual patient circumstances may affect the guideline (tear configuration, fixation used, associated procedures, etc.)

Phase	Goals	Precautions/Restrictions	Treatment
Weeks 0 – 6	<ul> <li>Protect surgical site</li> <li>PROM: 0-90 degree</li> <li>Reduce muscle atrophy</li> <li>Reduce swelling</li> <li>Decrease pain and inflammation</li> <li>SLR without extensor lag</li> </ul>	<ul> <li>ROM: 0-90 degrees</li> <li>Avoid active knee flexion</li> <li>Brace locked in extension with ambulation</li> <li>May unlock for exercises</li> <li>NWB or TTWB for 6 weeks per surgeon note</li> <li>**Defer to operative note for surgeon specific WB instructions**</li> </ul>	<ul> <li>PRICE         <ul> <li>Cryotherapy: 5-7 times per day</li> <li>Compression with TubiGrip/TEDS</li> </ul> </li> <li>ROM (limited to 0-90 deg):         <ul> <li>Supine knee extension with towel</li> <li>Patella mobilizations</li> </ul> </li> <li>Quadriceps recruitment/NMES</li> <li>Global LE isometric/proximal hip strengthening</li> <li>Gait training with crutches</li> <li>Initiate BFR; if applicable</li> <li>Initial Visit: FOTO, IKDC</li> </ul>
Weeks 6 – 12	<ul> <li>Discontinue knee immobilizer if no extensor lag</li> <li>Limit forced flexion</li> <li>Reduce atrophy/progress strengthening</li> <li>Reduce swelling</li> <li>Normalize gait</li> </ul>	<ul> <li>Progress to WBAT (wean crutches)</li> <li>No loading at knee flexion angles &gt;90 degrees (16 weeks)</li> <li>No jogging or sport activity</li> <li>Avoid painful activities/exercises</li> <li>Avoid isolated hamstring strengthening first 10 weeks</li> </ul>	<ul> <li>ROM: as tolerated</li> <li>Gait training from WBAT to independent</li> <li>Core stabilization exercises</li> <li>Neuromuscular re-education</li> <li>Global LE strengthening         <ul> <li>Limit deep knee flexion angles &gt;90 degrees</li> <li>Begin functional strengthening exercises between 0-60 degrees (bridge, minisquat, step up, etc)</li> </ul> </li> <li>Double limb -&gt; single limb balance/proprioception</li> <li>Aerobic training: walking program, stationary bike</li> </ul>
Weeks 12 – 16	<ul> <li>No effusion</li> <li>Full ROM</li> <li>Increase functional LE strength</li> <li>Isometric strength at &gt; 80% LSI (See functional assessment for return to running criteria)</li> <li>Pass Return to Run criteria</li> <li>Initiate basic plyometrics</li> </ul>	<ul> <li>No loading at knee flexion angles &gt;90 degrees (16 weeks)</li> <li>Avoid painful activities/exercises</li> <li>No jogging on painful or swollen knee</li> <li>No plyometric exercises until week 16</li> </ul>	<ul> <li>Increase loading capacity for lower extremity strengthening exercises</li> <li>Double limb -&gt; Single limb</li> <li>Continue balance/proprioceptive training</li> <li>Aerobic training: elliptical, stairmaster</li> <li>Week 16: begin low level plyometric and agility training,</li> </ul>
Weeks 16+	<ul> <li>Full ROM</li> <li>Functional strengthening</li> <li>Pass functional assessment</li> <li>Return to sport/activity</li> </ul>	Return to sport 5-6 months post-op with surgeon approval	<ul> <li>Gradually increase lifting loads focusing on form, control, and tissue tolerance</li> <li>Running program</li> <li>Progress as tolerated: ROM, Strength, Endurance, Proprioception/Balance, agility, Sport specific skills</li> <li>ARC Program</li> </ul>

This guideline is not meant to be prescriptive but a recommendation to the rehabilitation process. Progress may vary based on specifics of injury and procedure.



## **Meniscal Repair Functional Assessment**

Phase	Criteria	Testing
Week 12 - 16  Must meet criteria prior to running	<ul> <li>Full, symmetric ROM</li> <li>Y-balance anterior reach asymmetry &lt; 5 cm</li> <li>Quadriceps strength for isometric test &gt; 80% of uninvolved side</li> <li>Hip abduction strength for isometric test &gt; 80% of uninvolved side</li> </ul>	<ul> <li>Knee assessment including assessment for effusion</li> <li>Passive and active ROM</li> <li>Isometric knee extension at 60° and 90° with handheld dynamometry (HHD)</li> <li>Isometric hip abduction at neutral with HHD</li> <li>Single leg isometric squat at 60° on 3PQ</li> <li>Forward step down assessment</li> <li>FOTO, IKDC</li> </ul>
Months 5-6+  Must meet criteria prior return to sport	<ul> <li>Full, symmetric ROM</li> <li>100% LSI for isometric testing</li> <li>100% LSI for functional testing</li> </ul>	<ul> <li>Knee assessment including assessment for effusion</li> <li>Passive and active ROM</li> <li>Hop Test         <ul> <li>Single Hop</li> <li>Triple Hop</li> <li>Medial triple hop</li> <li>Medial rotation hop</li> </ul> </li> <li>Isometric knee extension at 60° and 90° with handheld dynamometer</li> <li>Isometric knee flexion at 60° with HHD</li> <li>Single leg isometric squat at 90° on 3PQ</li> <li>Single leg jump on 3PQ</li> <li>Drop jump</li> <li>Agility T-Test</li> <li>FOTO, IKDC</li> </ul>

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