

**HSS Rehabilitation Guidelines Following Mosaicplasty Procedures of the Knee (Week 0-6)**

<b>Weight Bearing Status / Bracing</b>	<b>Treatment Strategies</b>	<b>Criteria for Advancement</b>	<b>Precautions</b>
<p>Toe-Touch Weight Bearing with brace locked at 0° with crutches</p> <p>Partial Weight Bearing progressing to Weight Bearing as tolerated, Brace 0 → 20° for Patellofemoral lesions</p>	<p>Continuous Passive Motion (CPM)</p> <p>Active – Assistive Range of Motion</p> <p>Towel extensions</p> <p>Patella mobilization</p> <p>Quadriceps re-education (Quad Sets with EMS or EMG)</p> <p>Multiple Angle Quadriceps Isometrics ((tibiofemoral lesions) (Bilaterally – Submaximal)</p> <p>Short Crank ergometry → Standard ergometry</p> <p>SLR's (all planes)</p> <p>Hip progressive resisted exercises</p> <p>Pool exercises</p> <p>Lower Extremity Flexibility exercises</p> <p>Upper extremity cardiovascular exercises</p> <p>Cryotherapy</p> <p>Home therapeutic exercise program:</p>	<p>MD direction for Progressive Weight Bearing (Week 6)</p> <p>ROM 0 → 120°</p> <p>Proximal Muscle strength 5/5</p> <p>SLR (supine) without extension lag</p>	<p>Maintain weight bearing restrictions</p> <p>Post-op brace locked @ 0° 0 → 20° for Patellofemoral lesion</p> <p>Avoid neglect of CPM and range of motion exercises</p>

**HSS Rehabilitation Guidelines Following Mosaicplasty Procedures of the Knee (Week 6-12)**

<b>Weight Bearing Status / Bracing</b>	<b>Treatment Strategies</b>	<b>Criteria for Advancement</b>	<b>Precautions</b>
<p>Progressive Weight Bearing with crutches</p> <p>D/C crutches when gait is non-antalgic</p> <p>Post-op brace discontinued as good quadriceps control (ability to SLR without lag or pain) is demonstrated</p> <p>Unloader brace / Patella sleeve per MD preference</p>	<p>Computerized forceplate (NeuroCom) for weight bearing progression / patient education</p> <p>Underwater treadmill system (gait training)</p> <p>Gait unloader device</p> <p>AAROM exercises</p> <p>Leg Press (60° → 0° arc)</p> <p>Mini Squats / Weight Shifts</p> <p>Calf raises (bilateral)</p> <p>Retrograde treadmill ambulation</p> <p>Proprioception/Balance training:</p> <p>Initiate Forward Step Up program</p> <p>Stairmaster</p> <p>SLR's (progressive resistance)</p> <p>Lower extremity flexibility exercises</p> <p>OKC knee extension to 40° (tibiofemoral lesions)</p> <p>CKC exercises preferred</p> <p>Home therapeutic exercise program: Evaluation based</p>	<p>ROM 0° → WNL</p> <p>Normal patella mobility</p> <p>Normal gait pattern</p> <p>Demonstrate ability to ascend 8° step</p>	<p>Avoid descending stairs reciprocally until adequate quadriceps control &amp; lower extremity alignment is demonstrated</p> <p>Avoid pain with therapeutic exercise &amp; functional activities</p>

### HSS Rehabilitation Guidelines Following Mosaicplasty Procedures of the Knee (Week 12-18)

Weight Bearing Status / Bracing	Treatment Strategies	Criteria for Advancement	Precautions
<p>Full weight bearing with assistive device if needed</p> <p>Unloader brace / Patella sleeve per MD preference</p>	<p>Progress Squat program</p> <p>Initiate Step Down program</p> <p>Leg Press (emphasizing eccentrics)</p> <p>OKC knee extensions 90° → 40° (CKC exercises preferred)</p> <p>Advanced proprioception training (perturbations)</p> <p>Agility exercises (sport cord)</p> <p>Elliptical Trainer</p> <p>Retrograde treadmill ambulation / running</p> <p>Hamstring curls / Proximal strengthening</p> <p>Lower extremity stretching</p> <p>Forward Step Down Test (NeuroCom) @ 4 months</p> <p>Isokinetic Test @ 4 months (tibiofemoral lesions)</p> <p>Home therapeutic exercise program: Evaluation based</p>	<p>Ability to descend 8" stairs with good leg control without pain</p> <p>85% limb symmetry on Isokinetic testing (tibiofemoral lesions) &amp; Forward Step Down Test</p>	<p>Avoid pain with therapeutic exercise &amp; functional activities</p> <p>Avoid running till adequate strength development and MD clearance</p>

### HSS Rehabilitation Guidelines Following Mosaicplasty Procedures of the Knee (Week 18-?)

Weight Bearing Status / Bracing	Treatment Strategies	Criteria for Advancement	Precautions
<p>Full weight bearing with assistive device if needed</p>	<p>Continue to advance LE strengthening, flexibility &amp; agility programs</p> <p>Forward running</p> <p>Plyometric program</p> <p>Brace for sport activity (MD preference)</p> <p>Monitor patient's activity level throughout course of rehabilitation</p> <p>Reassess patient's complaint's (i.e. pain/swelling daily -- adjust program accordingly)</p> <p>Encourage compliance to home therapeutic exercise program</p> <p>Functional testing (Hop Test)</p> <p>Isokinetic testing</p> <p>Home therapeutic exercise program: Evaluation based</p>	<p>Hop Test ≥ 85% limb symmetry</p> <p>85% limb symmetry on Isokinetic testing (including patellofemoral lesions)</p> <p>Lack of apprehension with sport specific movements</p> <p>Flexibility to accepted levels of sport performance</p> <p>Independence with gym program for maintenance and progression of therapeutic exercise program at discharge</p>	<p>Avoid pain with therapeutic exercise &amp; functional activities</p> <p>Avoid sport activity till adequate strength development and MD clearance</p>