



# Rehab Protocol

Knee arthroscopy  
Microfracture

**LJ BRADLEY**   
ORTHOPAEDIC SURGEON

[northlandorthopaedicsurgeon.co.nz](http://northlandorthopaedicsurgeon.co.nz)

Post-op recovery		First 2 weeks	Date
Goals	<ul style="list-style-type: none"> <li>• Protect the knee and surgical incision</li> <li>• Recover from swelling and inflammation</li> <li>• Control of post-surgical pain</li> </ul>		
Precautions	<ul style="list-style-type: none"> <li>• Non-weight bearing on crutches</li> </ul>		
Recommendations	<ul style="list-style-type: none"> <li>• Rest and elevate as required</li> <li>• Ice the knee up to 3 times a day – particularly in the first 72 hours</li> <li>• Range of motion exercises of ankle</li> <li>• Range of motion exercises of hip</li> <li>• Gentle movement of the knee from full extension to 90 degrees of flexion as pain and swelling allows</li> </ul>		
Suggested exercises	<ul style="list-style-type: none"> <li>• Static quads contraction</li> <li>• Supine straight leg raise</li> <li>• Ankle pumps</li> <li>• Supine bed supported knee bend</li> <li>• Sitting supported knee bend</li> <li>• Supine knee extension – foot elevated/supported</li> </ul>		

Phase 1		Week 2 to week 6	
Goals	<ul style="list-style-type: none"> <li>• Increase range of motion</li> <li>• Begin strengthening hip and core</li> </ul>		
Precautions	<ul style="list-style-type: none"> <li>• Touch-weight bearing on crutches</li> <li>• The foot may rest on the ground when stationary</li> </ul>		
Recommendation	<ul style="list-style-type: none"> <li>• Hip and gluteal muscle strengthening</li> <li>• Gentle movement of the knee from full extension to 90 degrees of flexion</li> <li>• Ankle range of motion</li> </ul>		
Suggested exercises	<ul style="list-style-type: none"> <li>• Static quads contraction</li> <li>• Supine straight leg raise</li> <li>• Ankle pumps</li> <li>• Supine bed supported knee bend</li> <li>• Sitting supported knee bend</li> <li>• Supine knee extension – foot elevated/supported</li> <li>• Sitting knee extension stretch – foot on floor</li> <li>• Side leg raise – knee straight, knee flexed</li> </ul>		

Phase 2		Week 7 to week 12	
Goals	<ul style="list-style-type: none"> <li>• Comfortably walk normally</li> <li>• Gain full range of motion</li> </ul>		
Precautions	<ul style="list-style-type: none"> <li>• No running</li> <li>• No deep squats</li> </ul>		
Recommendations	<ul style="list-style-type: none"> <li>• Gradually begin taking weight through your leg when</li> </ul>		

	<p>you walk. Fully weight bear as able</p> <ul style="list-style-type: none"> <li>• Discard crutches when walking safely</li> <li>• Achieve full range of motion of knee – passive and active</li> <li>• Hip and gluteal muscle strengthening</li> <li>• Ankle and calf strengthening</li> <li>• Balance and control of the leg</li> <li>• Short walks</li> </ul>	
Suggested exercises	<ul style="list-style-type: none"> <li>• Wall slide mini squat</li> <li>• Double leg squats (0-60)</li> <li>• Sitting unsupported knee extension and flexion</li> <li>• Single leg stance – knee straight, knee flexed</li> <li>• Straight leg raise</li> <li>• Step ups</li> <li>• Double calf raises – progress to single calf raise</li> <li>• Side leg raise – knee straight, knee flexed</li> <li>• Gluteal band exercises</li> <li>• Bridging with gluteal contraction</li> <li>• Exercycle – low resistance, short interval</li> </ul>	

Phase 3		3 Months – 6 months	
Goals	<ul style="list-style-type: none"> <li>• Gain full function and strength</li> </ul>		
Precautions	<ul style="list-style-type: none"> <li>• Avoid collision sports or high risk recreational activity</li> <li>• Return to vigorous athletic activity as physiology allows (rapid return to rigorous strength training or endurance and speed training can lead to tendinopathies or injury)</li> </ul>		
Recommendations	<ul style="list-style-type: none"> <li>• Achieve full range of motion including high flexion</li> <li>• Concentrated full rehab program that includes strengthening of core, hip flexors, gluteal muscles, external rotators of the hip, quadriceps, hamstrings and calves. Gain in confidence during athletic activity. Neuromuscular control and co-ordination of leg</li> <li>• Long walks</li> <li>• Return to running in sensible progressive time frame</li> </ul>		
Suggested exercises	<ul style="list-style-type: none"> <li>• Double leg squats (0-90)</li> <li>• Single leg squats</li> <li>• Single leg hop</li> <li>• Step ups – increase height</li> <li>• Hop ups</li> <li>• Step downs</li> <li>• Resisted quads and hamstring weight training</li> <li>• Gluteal band exercises</li> <li>• Bridging</li> <li>• Exercycle – increase resistance and training length</li> </ul>		

