

ORTHOPEDIC AND SPORTS MEDICINE CENTER

SPORTS MEDICINE DIVISION
COMBINED REHAB PROTOCOLS



**Anne Arundel
Medical Group**
Orthopedic and Sports
Medicine Specialists

Office: (410) 268-8862
Fax: (410) 268-0380

**AAHS OUTPATIENT
PHYSICAL THERAPY**

Office: (443) 481-1140

**Knee Surgery –Minor Procedure
Rehab Protocol
Edited: May 2015**

TIMELINE

GOALS

EXERCISES/METHODS

<p>Early Post-operative Day 1-week 2</p>	<p>+Control swelling, inflammation +Obtain terminal knee extension/ hyperextension +Obtain SLR without lag +Normalize ambulation</p>	<p>+Extension: <ul style="list-style-type: none"> • Heel prop • calf (with ext) • hamstring stretches, • Quad sets (electrical stimulation prm), • 4 way SLR, • multi-directional patellar mobs +Flexion: <ul style="list-style-type: none"> • Heel slides • wall slides • bike +Weight acceptance training</p>
<p>Milestones to reach by end of week 2: Full knee extension Knee flexion > 120 degrees SLR without quad lag</p>		
<p>Sub-Acute Post-Operative: 2-6 weeks</p>	<p>+Avoid Patella Femoral pain +Full ROM +Pain Free functional strengthening</p>	<p>Leg press/total gym, squats (0-45) TKEs progressive CKC strength training with RNT Step ups and lunges (front, lateral) SLS static to dynamic training, Alter G elliptical</p>
<p>Milestones to reach by end of week 6: Normalized gait without assistive device Full pain free ROM Min to no swelling</p>		
<p>Advanced Activity: 6+ weeks</p>	<p>+Continue to progress functional strength +proprioception, +neuromuscular control +return to sport</p>	<ul style="list-style-type: none"> • Squats (0-90) • multi-planar lunges • advanced balance with dynamic surface training, • Plyometrics • running, • Agility • sports specific drills

BRACING

- None

ROM RESTRICTIONS

- None

WEIGHT BEARING

- Crutches until walk with no limp
- Then WBAT

OTHER RESTRICTIONS AND KEY CONSIDERATIONS

- None

SHOWERING

1. May Shower day 1 after surgery
2. Must "waterproof" surgical site for 5 days after surgery
3. No submerging wounds for 4 weeks

WOUND CARE

1. Remove everything except steri strips the day after surgery
2. Place clean gauze or opsite on wounds daily for 5 days

RETURN TO PLAY CRITERIA

Pre-RTP Criteria before testing can commence	<p>Full AROM</p> <p>Resolution of pain</p> <p>No/Trace joint effusion present</p> <p>MMT grossly 5/5 strength in LE</p> <p>LEFS: $\geq 75/80$ (95%)</p> <p>Lysholm Knee Rating: $\geq 95\%$</p> <p>1RM SL Leg Press $\geq 90\%$ contralateral side</p> <p>1RM SL Hamstring Curl $\geq 90\%$ contralateral side</p>
Lower Limb Symmetry Index (LSI): LSI % (mean score of 3 trials on injured limb/ mean score of 3 trials on uninjured limb) x 100	<p>SL Hop: $\geq 90\%$</p> <p>SL Triple Hop: $\geq 90\%$</p> <p>SL 6 meter Timed Hop: $\geq 90\%$</p> <p>SL Cross-over Hop: $\geq 90\%$</p> <p>Overall Score: $\geq 90\%$</p>
Vail Sports Tests:	<p>Passing Score $\geq 46/54$ (85%)</p>
Tuck Jump Assessment (TJA):	<p>perfect score on the TJA or improvement of 20 percentage points from the initial score</p>
Single Leg Squat: No Errors in Form (Errors listed right)	<p>Arm strategy: removal of hand off the waist</p> <p>Trunk alignment: leaning in any direction</p> <p>Pelvis plane: loss of horizontal plane</p> <p>Knee position: tibial tuberosity medial to second toe or tibial tuberosity medial to medial border of foot</p> <p>Steady stance: subject stepped down on non-tested limb, or foot wavered from side-to-side</p>
Modified Star Balance Excursion Test (Y Balance Test):	<p>SEBT % = ((mean score of 3 trials in anterior distance + mean score of 3 trials in posterior lateral distance + mean score of 3 trials in posterior medial distance)/ leg length of stance limb) x 100. Passing Score $\geq 94\%$</p>
Core Testing: (ongoing research): $\geq 90\%$ of all standard timed tests:	<p>Right Single Leg Bridge: Men 95 seconds; Females 75 seconds</p> <p>Left Single Leg Bridge: Men 99 seconds; Females 78 seconds</p> <p>Flexor Endurance Test: Men 136 seconds; Females 134 seconds</p> <p>Extensor Endurance Test: Males 160 seconds; Females 185 seconds</p> <p>Lower Abdominal Muscle Testing: Males 5/5; Females $\geq 4/5$ (75 \square = 3/5, 60 \square = 3+/5, 45 \square = 4-/5, 30 \square = 4/5, 15 \square = 4+/5, 0 \square = 5/5)</p>

RTP INSTRUCTIONS

RTP evaluation can progress throughout treatment as appropriate

PRE-RTP

Complete all testing in Pre-RTP section. Only Continue on when able to pass

SESSION 1

LSI, Vail Sports, TJA

SESSION 2

Single leg squat, Y Balance, Core Testing