Rehabilitation Precautions
Progression is symptom and criterion-based, dependent on soft tissue healing, patient demographics, and clinician evaluation

Weeks 0-1
Considerations:
- Pain control
- Edema control
- Wound healing/incision site care/scar massage - pt education
- Begin FWB independent of crutches when pt without signs of antalgia, increased pain and/or effusion, full knee extension present during gait, and demonstrates sufficient quadriceps activation

ROM
- Full active knee extension
- Patellar mobilization
- Knee flexion at least 90°

Neuromuscular control/Strengthening
- Quadriceps/VMO recruitment: estim or biofeedback as necessary for quadriceps re-education
- Hip ABD/core strength
- Eccentric knee control with CKC therex

Mobility
- Quadriceps
- Hip flexors
- Hamstrings
- IT Band
- Gastroc/soleus

Goals to Progress to Next Phase
1. Minimal to no edema
2. Minimal to no pain
3. Normalized gait
4. Full active knee extension
5. Normal patellar mobility
6. SLR without extensor lag
7. Well-healing incisions without signs of infection
Weeks 2-3
ROM
- Edema control
- 0-125°

Mobility
- Quadriceps
- Hip flexors
- Hamstrings
- IT Band
- Gastroc/soleus

Neuromuscular control/Strengthening
- Proprioception exercises
- Multi-angle CKC exercises
- Balance training
- Quadriceps recruitment
- Hip ABD/core strength
- Light plyometrics: emphasize correct landing mechanics

Functional Activities
- Ascend/descend stairs with reciprocal gait pattern independent of UE support

Goals to Progress to Next Phase
1. Full ROM at least 90% of contralateral limb
2. No pain with strengthening exercises
3. Good eccentric knee control with CKC exercises and light plyometrics.

Weeks 4-8)
ROM
- Full AROM
- No effusion

Mobility
- Quadriceps
- Hip flexors
- Hamstrings
- IT Band
- Gastroc/soleus

Neuromuscular control/Strengthening
- Sport-specific drills
- Plyometrics
- Core strength
- Begin interval running program
- Functional testing: hop tests, star test, Y balance, etc
Goal: Return to sport

Functional tests

1.) Single hop for distance: Have the subject line their heel up with the zero mark of the tape measure, wearing athletic shoes. The subject then hops as far as he can, landing on the same push off leg, for at least 3 seconds. The arms are allowed to move freely during the testing. Allow him to perform 4 practice hops on each leg. Then, have the subject perform 4 trials, recording each distance from the starting point to the back of the heel. Average the distances for each limb.

2.) Cross-over hop for distance: This test is set up with a 15cm strip, extending 6 meters. The subject lines his heel up at the zero mark of the tape measure and hops 3 times on one foot, crossing over the center line each time. Each subject should hop as far forward as he can on each hop, but only the total distance hopped is recorded. Allow the subject to perform 4 practice rounds before recording. Average the distances for each limb.

Scoring:

- Begin with the uninvolved leg. If using tape to mark distance, remove it before the next trial to minimize visual cues.

- Greater than a 15% difference in average distance between the right and left limbs should be cause for concern, indicating quad, and hamstring weaknesses that should be addressed prior to return to sport.

- If patient fails test, evaluate and implement appropriate strength/stability/balance exercise strategies. Once resolved, test again.

References
