

## REHAB PROTOCOL: ADVANCED KNEE REHAB PROTOCOL

### EVALUATION & TREATMENT:

- Begin progressive weight-bearing strengthening exercises, with focus on:

- Leg press (Double leg and single leg, progressing towards strength of non-affected limb)
- Squats

§ Optimize form, with knees over feet and prevention of valgus thrust

§ Avoid deep squats/hyperflexion (beyond 100 degrees)

§ Add weight, progress reps as tolerated

- Step ups and side step up/downs @ Advance to lunges and side lunges
- Stationary bike (60 RPM minimum with increasing resistance)
- Leg extensions (eccentrics, as tolerated...may eliminate if prohibitive patellofemoral pain)
- Hamstring strengthening (leg curls, Romanian deadlifts, bridge @ advance to single-leg bridge)
- Hip/core stabilization exercises (e.g. hip ABD/ERs to optimize knee function/form)
- Balance/proprioception: static and dynamic balance activities
- Slide board (if available)

- Please clear for/advance to straight ahead running only when operative side Q/HS strength = 70% strength of contralateral/non-operative side

- Manual muscle testing should not be used alone to estimate
- Single leg press test: E.g. if non-op sided reps for a given weight=20, and operative-sided reps=15, then strength estimate is 75%
- Encourage initial running to be light jogging on soft surfaces (e.g. rubberized track, running shoes on dry field, soft treadmill) before advancing to trail running or pavement

- Please clear for/advance to agility exercises (plyometrics, jumping, landing, lateral movements, sports-specific exercises) only when op side Q/HS strength = 90% strength of non-op side

- Please assess for full return to sports at some point in the next \_\_\_\_\_ weeks/months, which entails testing for symmetrical/full strength, symmetrical balance/stability, symmetrical performance w/ agilities/sports-specific exercises