

Appendix

This is a list of objective measures that will be tested during the Level 1 and Level 2 tests at their respective times post-operatively. Please use this information to prepare your patient for formal testing. Portions of the test may need to be re-assessed prior to clearance by the physician if there are significant deficits.

Level 1 Test (4 months) Components:

ACL-RSI Outcome Measure

Mid-range isometric hip abduction strength testing bilaterally 3 reps each: 05 holds :10 rest

Mid-range isometric hip extension strength testing bilaterally 3 reps each: 05 holds :10 rest

90 degree prone hamstring isometrics 3 reps each :05 holds :10 rest

Functional Movements with Video Analysis (all performed on both limbs)

- 8" forward step down
- 18" drop jump
- Lateral shuffle 2x5 yards

Single Leg Squat Test

- 60 bpm metronome (1 up, 1 down)
- Thigh parallel in sitting (18-21" height box or table works for most)
- No touching foot during reps
- Count reps to fatigue

Single Leg Calf Raise Test

- 60 bpm metronome (1 up, 1 down)
- Count reps to fatigue
- To max height – use standiometer if possible

90° isometric quadricep strength testing bilaterally 3 reps each :05 holds :10 rest

Isokinetics (use clinical judgement on preferred speeds)

- 60°/sec 2x5 reps :30 rest, 300°/sec x20 reps
OR
- 120°/sec 2x5 reps :30 rest, 240°/sec x20 reps

Midterm Testing (in between Level 1 and Level 2 Testing)

- Depending on patient progress and physician preference, selective midterm testing can be completed in between Level 1 and Level 2 tests. This can consist of any number of the items from Level 2 testing.

Level 2 Test (8+ month) Components:

- The purpose of the Level 2 test is to determine any areas the patient may need to improve on to ensure a safe return to sport.
- Adequate testing scores (generally within 10% of the other side for most tests) will result in beginning a graduated return to sport or activity consistent with the patient's goals and safety in mind.

ACL-RSI Outcome Measure

Mid-range isometric hip abduction strength testing bilaterally 3 reps each: 05 holds :10 rest

Mid-range isometric hip extension strength testing bilaterally 3 reps each: 05 holds :10 rest

90 degree prone hamstring isometrics 3 reps each :05 holds :10 rest

Functional Movements with Video Analysis (all performed on both limbs)

- 8" forward step down
- 18" drop jump
- Lateral shuffle 2x5 yards
- Decelerations x2
- 90° cut
- Triple hop (90% of average triple hop distance)

90° isometric quadricep strength testing bilaterally 3 reps each :05 holds :10 rest

Single Leg Squat Test

- 60 bpm metronome (1 up, 1 down)
- Thigh parallel in sitting (18-21" height box or table works for most)
- No touching foot during reps
- Count reps to fatigue

Single Leg Calf Raise Test

- 60 bpm metronome (1 up, 1 down)
- Count reps to fatigue
- To max height – use standiometer if possible

Single leg vertical – average of 2 trials for height

Single leg hop for distance 3 repetitions each side

- Measure from the heel, MUST stick the landing for a full 2 seconds
- Normalize and compare to leg length (greater trochanter to the lateral malleolus)
 - Distance jumped divided by leg length
- 5 trials – average the best three or take the best one and compare side to side
- Looking to be within 10% of opposite side

Medial triple hop for distance

- Measure from the lateral foot, MUST stick the landing for a full 2 seconds
- 5 trials – average the best three or take the best one and compare side to side
- Looking to be within 10% of opposite side

Lateral hop testing – tape lines 40 cm apart, number of **successful** side-to-side hops on single leg in 30 seconds

- (touching the tape does not count)

Isokinetics (use clinical judgement on preferred speeds)

- 60°/sec 2x5 reps :30 rest, 300°/sec x20 reps

Compare isokinetic results to pre-surgery values on uninvolved side to insure return to normal strength.

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Revision Dates: 2/2015, 5/2015, 02/2016, 09/2018, 01/2019, 11/2020