ISOKINETIC ASSESSMENT of KNEE EXTENSION and FLEXION

Last modified: Oct 2012

- Appropriate musculoskeletal screening
  - Minimal 5 months post ACL reconstruction for maximal testing
  - Patient should not be limited by pain (i.e. patello-femoral pain will produce an invalid test, as the patient cannot perform maximally)

- General body stretching and warm-up
  - 5 minutes on stationary bike
  - Stretch specific body parts (quadriceps, hamstrings, hip flexors, etc.)

- Set up patient with optimal stabilization
  - Alignment of joint and dynamometer axes of rotation
  - Verbal instruction to isokinetic exercise
  - Gravity correction when appropriate

- Warm-up (3 submaximal, 3 maximal repetitions)
  - Rest (30 s to 1 min)
  - Maximal test at slow velocity (90°/sec, 5 repetitions)
  - Rest (30 s to 1 min)
  - Maximal test at fast velocity (180°/sec, 5 repetitions)
  - Rest (30 s to 1 min)
  - Multiple repetition endurance test (240°/sec, 10 repetitions)
  - Test contralateral extremity

- Ensure test results are recorded
- Print results
- Review results with patient.

Jason K. Lowry, MD