

Table 1. KT 1000 knee ligament arthrometer exam, isokinetic test, hop test(s), quality movement assessment at 6 months

**Acceptable quality movement assessment**

**Precautions:**

**Acceptable quality movement assessment**

**Anterior cruciate ligament (BTB) rehabilitation guideline**

**Post-operative phase 1 (weeks 0–2)**

**Goals:**

- Emphasize patient compliance to home therapeutic exercise program and weight bearing precautions/progression

**Criteria for advancement:**

- Progressive weight bearing/WBAT (patella tendon) with crutches brace opened 0°
- Brace changed to MD preference (OTS brace, patella sleeve, etc.)
- Functional progression pending KT1000 and functional assessment

**Post-operative phase 4 (weeks 14–22)**

**Goals:**

- Avoid descending stairs reciprocally until adequate quadriceps control and lower extremity alignment
- Lack of apprehension with plyometric and agility activities to date

**Post-operative phase 5—return to sport (weeks 22–?)**

**Goals:**

- PWB → WBAT (patella tendon) with brace locked at 0°
- Demonstrate ability to unilateral (involved extremity) weight bear without pain

**Post-operative phase 2 (weeks 2–6)**

**Goals:**

- Proprioception training: prop board/balance system/contralateral Theraband exercises
- Reassess patient's complaint's (i.e., pain/swelling daily—adjust program accordingly)
- Towel extensions, prone hangs, etc.
- Quadriceps re-education (quad sets with EMS or EMG)
- Active flexion/active-assisted extension 90°
- Upper extremity cardiovascular exercises as tolerated
- Avoid pain with therapeutic exercise and functional activities

**Treatment strategies:**

- 50°, if good quadriceps control (good quad set/ability to SLR without lag or pain)
- Aquaciser (gait training) if incision benign
- Hamstring/calf flexibility exercises
- Retrograde incline treadmill ambulation

**Home therapeutic exercise program: Individualized**

**Criteria for advancement:**

- Good patella mobility

**Post-operative phase 3 (weeks 6–14)**

**Goals:**

- Avoid running and sport activity till adequate strength development and MD clearance

**Treatment strategies:**

- Home therapeutic exercise program: evaluation based

**Criteria for advancement:**

- Maximize strength and flexibility as to meet demands of activities of daily living
- Isokinetic test  $\geq 85\%$  limb symmetry

**Precautions:**

- Avoid sport activity till adequate strength development and MD clearance

**Treatment strategies:**

- Isotonic knee extension (full arc/pain and crepitus free)

**Home therapeutic exercise program: Individualized**

**Criteria for advancement:**

- Home therapeutic exercise program:

**Individualized Criteria for discharge:**

- 90°
- 0°
- 5°
- 90°
- 130°
- 0°
- 125°
- 40°