

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 I (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° → 0° → 5° → 90° → 130° → 0° → 125° → 40°