

## Rehabilitation Protocol: Anterior Cruciate Ligament (ACL) Reconstruction with Bone-Patellar Tendon-Bone Autograft

### Phase I (Weeks 0-4)

- **Weightbearing:** As tolerated with crutches (may be modified if concomitant meniscal repair/meniscal transplant or articular cartilage procedure is performed)
- **Hinged Knee Brace:**
  - Locked in full extension for ambulation and sleeping (**Weeks 0-1**)
  - Unlocked for ambulation and removed while sleeping (**Weeks 1-4**)
- **Range of Motion** – AAROM → AROM as tolerated
- **Therapeutic Exercises**
  - Quad/Hamstring sets
  - Heel slides
  - Non-weightbearing stretch of the Gastroc/Soleus
  - Straight-Leg Raise with brace in full extension until quad strength prevents extension lag

### Phase II (Weeks 4-6)

- **Weightbearing:** As tolerated -- discontinue crutch use
- **Hinged Knee Brace:** Discontinue brace use when patient has achieved full extension with no evidence of extension lag
- **Range of Motion** – Maintain full knee extension – work on progressive knee flexion
- **Therapeutic Exercises**
  - Closed chain extension exercises
  - Hamstring curls
  - Toe raises
  - Balance exercises
  - Progress to weightbearing stretch of the Gastroc/Soleus
  - Begin use of the stationary bicycle

### Phase III (Weeks 6-16)

- **Weightbearing:** Full weightbearing
- **Range of Motion** – Full/Painless ROM
- **Therapeutic Exercises**
  - Advance closed chain strengthening exercises, proprioception activities
  - Begin use of the Stairmaster/Elliptical
  - **Can Start Straight Ahead Running at 12 Weeks**

### Phase IV (Months 4-6)

- Gradual return to athletic activity as tolerated
- Maintenance program for strength and endurance