



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 – remove for hygiene and PT
- **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
- Can return to sports if passes strength testing