

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

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Diagnosis: \_\_\_\_\_

Date of Surgery: \_\_\_\_\_

**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 at all times unless doing PT/Exercise (**Weeks 0-1**)
  - Unlocked for ambulation and removed while sleeping as long as can do straight leg raise (**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
  - Active extension of the knee/pushdowns, goal to PREVENT FLEXION CONTRACTURE
  - Prevention of Arthrogenic Muscle Inhibition (AMI)
    - <https://journals.sagepub.com/doi/10.1177/26350254221086295>
    - The link above contains an education video regarding AMI

**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



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**Comments:**

**Frequency:** \_\_\_\_ times per week

**Duration:** \_\_\_\_ weeks

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_