

Rehabilitation Protocol: Anterior Cruciate Ligament (ACL) Reconstruction with Hamstrings Autograft

• Phase I (Weeks 0-4)

- **Weightbearing:** As tolerated with crutches (may be modified if concomitant meniscal repair 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
 - **No Hamstring Stretching Until 4 Weeks Post-Op**

• 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**
 - **Begin hamstring strengthening**
 - Advance closed chain strengthening exercises, proprioception activities



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- 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
- **Return to sports at 9 months**

*For Patients with Meniscal Repair + ACL Reconstruction

- **Weightbearing:** as tolerated with knee brace locked straight for 4 weeks
- **Hinged Knee Brace**
 - Locked in full extension for ambulation and sleeping (Weeks 0-4)
- **Range of Motion**
 - Weeks 0-4: Full ROM – No weightbearing at flexion angles greater than 90°
 - Weeks 4-6: Full ROM as tolerated – progress to flexion angles greater than 90°

*For Patients with **Meniscus Root Repair or Cartilage Repair** + ACL Reconstruction

- **Weightbearing:** toe-touch weight bearing for 6 weeks
- **Hinged Knee Brace**
 - Locked in full extension for ambulation and sleeping (Weeks 0-4)
- **Range of Motion**
 - Weeks 0-4: Full ROM – No weightbearing at flexion angles greater than 90°
 - Weeks 4-6: Full ROM as tolerated – progress to flexion angles greater than 90°