



# Indiana University Health

*IU Health Physicians Orthopedics & Sports Medicine*

## **ANTERIOR CRUCIATE LIGAMENT (ACL) RECONSTRUCTION WITH BONE-PATELLAR TENDON-BONE AUTOGRAFT**

### **PHYSICAL THERAPY PROTOCOL**

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**Patient Name:** \_\_\_\_\_

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

**Procedure: Right/Left ACL Reconstruction with Patellar Autograft**

**Associated Procedure (circled if applicable): Meniscectomy/Meniscal Repair**

Evaluate and Treat – no open chain or isokinetic exercises

Provide patient with home exercise program

**Frequency:** \_\_\_\_\_ x/week x \_\_\_\_\_ weeks



— **Phase I (0-6 wks): *Period of protection*\*\*\***

- Weight bearing as tolerated without assist by post-op day 10.** Patients in hinged knee braces, who have had their own patellar tendon used, should be locked in extension while sleeping or ambulating until week 6. Patients who have had an allograft or hamstring used may discontinue the immobilizer after 10-14 days.
- ROM** – progress through passive, active and resisted ROM as tolerated. Extension board and prone hang with ankle weights (up to 10 lbs) recommended. Stationary bike with no resistance for knee flexion (alter set height as ROM increases). Goal: full extension by 2 weeks, 120 degrees of flexion by 6 weeks).
- Patellar mobilization**, 5-10 minutes daily.
- Strengthening** – quad sets, SLRs with knee locked in extension. Begin closed-chain work (0-45 degrees) when full weight-bearing. No restrictions to ankle/hip strengthening.
- No elliptical.

\*\*\*Note: if a meniscal repair was done simultaneously, please amend the above with the following restrictions:

- WBAT with brace limited to 0-90 degrees x 4 weeks**
- Limit ROM 0-90 degrees x 4 weeks**
- No tibial rotation x 4 weeks**

— **Phase II (6-12 wks): *Advance strengthening.***

- Transition to custom ACL brace** if ordered by physician.
- ROM** – continue with daily ROM exercises (goal: increase ROM as tolerated)
- Strengthening** – increase closed-chain activities to 0-90 degrees. Add pulley weights, theraband, etc. Monitor for anterior knee pain symptoms. Add core strengthening exercises.
- Add side lunges and/or slideboard.
- Continue stationary bike and biking outdoors for ROM, strengthening, cardio.

— **Phase III (12-18 wks): *Begin more sport-focused conditioning.***

- Advance strengthening as tolerated, continue closed-chain exercises. Increase resistance on equipment.
- May begin Elliptical.
- No straight ahead jogging until 4-4.5 months post op.
- Begin to wean patient from formal supervised therapy encouraging independence with home exercise program.
- Strict avoidance of open chain exercises.



- Other:**
- Modalities                       Electrical Stimulation                       Ultrasound
  - Heat before/after                       Ice before/after exercise
  - May participate in aquatherapy after week three, begin aqua-running week 6

**By signing this referral, I certify that I have examined this patient and physical therapy is medically necessary. This patient  would  would not benefit from social services.**

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

**Bryan M. Saltzman, MD**