



# Indiana University Health

*IU Health Physicians Orthopedics & Sports Medicine*

## **ANTERIOR CRUCIATE LIGAMENT (ACL) RECONSTRUCTION WITH HAMSTRING AUTOGRAFT**

### **PHYSICAL THERAPY PROTOCOL**

**Bryan M. Saltzman, M.D.**

Indiana University Health Physicians

Assistant Professor of Orthopaedic Surgery, Indiana University

Sports Medicine, Cartilage Restoration, Shoulder/Elbow

IU Health Methodist Hospital – 1801 N Senate Ave, Indianapolis, IN 46202

IU Health North – 201 Pennsylvania Pkwy #100, Carmel, IN 46280

317-944-9400

[www.bryansaltzmanmd.com](http://www.bryansaltzmanmd.com)

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

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

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

**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

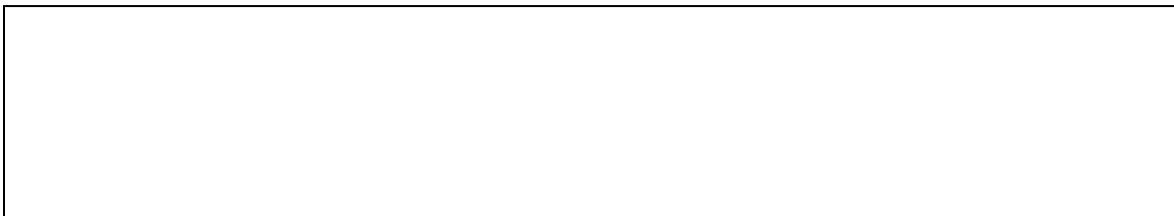


	<b>WEIGHT BEARING</b>	<b>BRACE</b>	<b>ROM</b>	<b>EXERCISES</b>
<b>PHASE I</b>  0-4 weeks	As tolerated with crutches*	<b>0-1 week:</b> Locked in full extension for ambulation and sleeping  <b>1-4 weeks:</b> Unlocked for ambulation, remove for sleeping**	As tolerated	Heel slides, quad/hamstring sets, patellar mobs, gastroc/soleus stretch  SLR w/ brace in full extension until quad strength prevents extension lag
<b>PHASE II</b>  4-12 weeks	Full, progressing to normal gait pattern	Discontinue at day 28 if patient has no extension lag	Main full extension and progressive flexion	Progress Phase I  Begin toe raises, closed chain quads, balance exercises, hamstring curls, stationary bike, step-ups, front and side planks, hip/glute/core, pool
<b>PHASE III</b>  12-16 weeks	Full, without use of crutches and with a normalized gait pattern	None	Gain full and pain-free	Advance closed chain strengthening, progress proprioception activities  Begin stairmaster, elliptical and running straight ahead
<b>PHASE IV</b>  16-24 weeks	Full	None	Full and pain-free	<b>16 wks:</b> Begin jumping  <b>20 wks:</b> Advance running to sprinting, backward running, cutting/pivoting/changing direction, initiate plyometric program and sport-specific drills  <b>22 wks:</b> Advance as tolerated FSA completed at 22 wks***
<b>PHASE V</b>  > 6 months	Full	None	Full and pain-free	Gradual return to sports participation after completion of FSA  Maintenance program based on FSA

\*Modified with concomitantly performed meniscus repair/transplantation or articular cartilage procedure

\*\*Brace may be removed for sleeping after first post-operative visit (day 7-10)

\*\*\*Completion of FSA (Functional Sports Assessment) not mandatory, but recommended at approx 22 wks post-op for competitive athletes returning to play after rehab





**\*\*\*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**

**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**