



# Indiana University Health

*IU Health Physicians Orthopedics & Sports Medicine*

## **MENISCUS ALLOGRAFT TRANSPLANTATION (MAT)**

### **PHYSICAL THERAPY PROTOCOL**

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

**Patient Name:** \_\_\_\_\_ **Date of Surgery:** \_\_\_\_\_

\_\_\_ **Evaluate and Treat**                      \_\_\_ **Provide patient with home program**

**Frequency:** \_\_\_\_\_x/week    x    \_\_\_\_\_weeks

#### **General Precautions:**

- NWB for 6 weeks
- Transition to WBAT between 6-8 weeks
- All weightbearing is in extension for the 6-8 week transition
- ROM is limited to 90 degrees for 4 weeks; full ROM progression thereafter
- Brace use for 8 weeks or later if not yet safe to d/c per PT team
- Avoid tibial rotation for 8 weeks



### **Phase I (0-6 weeks): *Period of protection***

- **Weightbearing:**
  - Non-Weight Bearing (NWB) with crutches, brace locked in extension.
- **Brace:**
  - Locked in extension for ambulation and sleeping (removed for hygiene and ROM exercises).
- **ROM:**
  - 0-4 weeks: 0-90° (NWB). Ensure full extension by 2 weeks.
  - 4-6 weeks: Full NWB range of motion allowed.
- **Therapeutic exercises:**
  - Patellar mobilizations: 5-10 minutes daily
  - Electric stimulation for quad control
  - Heel slides
  - SLRs supine
  - Isometrics for quads, hip abductors and adductors
  - Passive leg hangs to 90°
  - Ankle/hip strengthening

### **Phase II (6-12 weeks): *Strengthening phase.***

- **Weightbearing:** Progression to WBAT weeks 6-8
- **Brace:** Unlock week 8 and discontinue once able to perform 10 SLR without lag.
- **ROM:** Full active ROM
  - **Therapeutic Exercises:**
    - As above with progressive resistance
    - Progress close chain activities
    - Proprioception exercises
    - Week 8:
      - Begin stationary bike without resistance
      - Lunges/leg press 0-90°
- **Restrictions:** No running, no impact activities.

### **Phase III (12-20 weeks): *Sports-specific activities***

- **Weight Bearing:** As tolerated.
- **ROM:** Full active ROM.
- **Therapeutic Exercises:**
  - As above.
  - Focus on single-leg strengthening and balance
  - Eccentric exercises
  - Begin jogging program 4 months post op.
    - Once able to jog 20-30 minutes (5-6 weeks into program) without discomfort or swelling, may progress to functional activities to include figure 8's, cutting and jumping.



**Phase IV(> 20 weeks): *Return to athletics.***

- **Weight Bearing:** As tolerated.
- **ROM:** Full active ROM.
- **Therapeutic Exercises:**
  - As above.
  - Gradual return to athletic activity as tolerated
  - Maintenance program for strength and endurance
- **Criteria to return to sports (~ 6mo):**
  - Full pain free ROM
  - Normal isokinetic evaluation and function tests
  - Satisfactory performance of sport specific activities without effusion

**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**