



**MULTILIGAMENTOUS KNEE RECONSTRUCTION: ACL / PCL / MCL / POSTEROLATERAL CORNER**

**PHYSICAL THERAPY PROTOCOL**

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

OrthoCarolina

Assistant Professor of Orthopaedic Surgery, Atrium Health

Sports Medicine & Shoulder/Elbow

1915 Randolph Rd, Charlotte, NC 28207

704-323-3000

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

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

**Procedure:** Right/Left Knee

ACL +/- PCL +/- Posterolateral Corner +/- Posteromedial Corner/MCL

**Associated Procedure (circled if applicable):**

Meniscectomy/Meniscal Repair

High Tibial Osteotomy/Distal Femoral Osteotomy

Evaluate and Treat – no open chain or isokinetic exercises

Provide patient with home exercise program



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

**\*If PCL or Posterolateral Corner: No resisted knee flexion or hyper-extension x 6 months\***

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

- **Non weight-bearing with brace locked in extension.** Touch down weight-bearing is allowed for transfers only. Brace at all times except for PT, hygiene.
- **ROM:** brace should be locked in extension. Begin progressive passive and active-assisted ROM from 0 to 90 degrees. Goal: full extension to 90 degrees of flexion by week 6.
- **Patellar mobilization:** 5-10 minutes daily.
- **Strengthening:** quad sets, SLRs with knee locked in extension. No restrictions to ankle/hip strengthening.

\_\_\_ **Phase II (6-12 wks): *Transition phase.***

- **Gradually progress weight bearing with the brace progressively unlocked.** Week 7: 25% weight bearing with brace locked in extension; Week 8: 50% weight-bearing with brace locked in extension, Week 9: 75% weight-bearing with brace unlocked 0-30, Week 10: full-weight-bearing with brace unlocked 0-90. D/C brace after week 10 if good quad control achieved.
- **No resisted knee flexion or hyper-extension.**
- **ROM:** Advance active and passive ROM as tolerated. End range stretching may be accompanied by weighted prone heel hangs if full extension is not yet achieved. In some cases, static progressive bracing may be prescribed. Goal: full motion by 3 months.
- **Strengthening:** Advance isometric quad and hamstring strengthening. Begin and advance closed-chain strengthening (0-90 degrees) once full-weightbearing (ie. Week 10). Add pulley weights, theraband, etc..

\_\_\_ **Phase III (3-9 months): *Advance conditioning and transition back to full activities.***

- Aggressive end-range stretching if full ROM not yet achieved.
- Advance strengthening as tolerated, with an aggressive focus on closed-chain exercises. Increase resistance on equipment.
- Begin plyometrics and increase as tolerated, starting sport-specific drills around 4-6 months.



- Begin to wean from formal supervised therapy encouraging independence with home exercise program.
- Patients may return to full activities once motion is adequate and strength is at least 80% of the opposite side (usually around 9 months postoperatively).
- MMI is variable - depending on the extent of reconstruction - but is usually by 9-12 months post-reconstruction.

**\_\_ 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**