Delaware Physical Therapy Clinic

540 S. College Ave., Suite 160
University of Delaware
Newark, Delaware 19713
Ph: (302) 831-8893
Fax: (302) 831-4468

Rehab Practice Guidelines for:
Proximal-Distal Realignment Surgery

Assumptions: 1.Soft tissue healing for the proximal repair (5-6 weeks)
2. Bone healing for the distal realignment (4-6 weeks – Rigid screw fixation)

Primary surgery: Medial re-alignment of the VMO
Distal re-alignment with rigid fixation

Secondary surgery: Chondroplasty
Limited Lateral Release

Precautions: **No full weightbearing without wearing an immobilizer for 8 weeks (risk of fracture)**
No NMES over the VMO (Protect suture repair)
Perform protected electrical stimulation program

Considerations: Hinged knee brace can be used for sitting but is locked during ambulation.
Painful stress riser may develop in the first 12 weeks. If this happens after the immobilizer has been discontinued, the patient should resume wearing the immobilizer until symptoms are alleviate

Expected # of visits: 22-48 visits

Week 1	**Treatment**	**Milestones**
Early Post-op Phase **No restrictions on passive knee ROM** 2-3x/week **TOTAL VISITS** 2-3 visits	Protected Electrical Stimulation Program • Knee stabilized isometrically at 30 degree knee flexion • ***Patella taped medially*** • Electrodes over proximal and distal quad (Do not place electrodes over the VMO, place more proximal) • 10 sec. on/50 sec. off • 10 to 15 contractions Treat impairments Improve quadriceps strength and control – active superior patellar glide Prevent lateral scarring Include ITB stretching in clinic and home Modalities for pain control of distal ITB/Lateral PF Ligament (PRN)	Active quadriceps contraction with superior patellar glide – expect a quad lag Full passive knee extension WBAT in immobilizer (use crutches until safe without)

Delaware Physical Therapy Clinic

540 S. College Ave., Suite 160
University of Delaware
Newark, Delaware 19713
Ph: (302) 831-8893
Fax: (302) 831-4468

Weeks 2-6 Intermediate Post-op Phase 2-3x/week **TOTAL VISITS** 12-18	Restore patellar mobility (clinic and home program) passive superior glide Incision site Desensitization (PRN) Ambulate in immobilizer until week 8 D/C crutches when quadriceps adequate to control extension during stance 4-6 weeks: Begin closed chain activities: i.e. partial wall sits Bilateral exercises only. **No squats or lunges**	SLR without quad lag by week 6 Full passive knee extension and flexion to 90° by week 2, ≥120° by week 6.

Weeks 7-16 Late Post-op Phase 2-3x/week **TOTAL VISITS** 22-48	Gait Training: **+quad lag** need to be in immobilizer or locked knee brace and/or crutches **-quad lag** can DC the immobilizer Resistive quad exercise may progress to angles greater than 30 – 40 degrees of knee flexion Closed chain continue with restrictions listed in Weeks 2-6 Progression to unilateral exercise requires x-ray report of no loosening of distal fixation, no tibial pain with unilateral knee extension, and no lag. ○ **MD needs to clear the patient for unilateral closed chain activities.** **No squats or lunges** NMES may progress to angles greater than 30° **No MVIC until 12 weeks**	Full ROM Ambulation without the use of immobilizer by week 8

Considerations:

1. **No burst testing and functional hop testing until at least 20 weeks post-op**
2. **Full functional return to ADL's expected in 5-6 months**
3. **Running progression can be initiated when quadriceps index ≥ 90%, ROM is full and patient is ≥ to 20 weeks post-op**
4. **Return to sports expected in 9 months**