Delaware Physical Therapy Clinic

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

Rehabilitation Practice Guidelines for:
Proximal Realignment Surgery

Assumptions:	Soft tissue healing for the proximal repair (4-6 weeks)
Primary surgery:	Medial realignment of the VMO
Secondary surgeries (possible):	Limited Lateral Release
Expected # of visits:	20-36

Precautions and Other Considerations	
Precautions	▪ WBAT in immobilizer first 4 weeks ▪ No NMES over the VMO (Protect suture repair) ▪ Perform protected electrical stimulation program ▪ No restrictions on passive knee ROM
Other Considerations	▪ Full functional return for ADL's expected in 3-4 months ▪ No Burst testing and Functional Hop testing until 16 weeks post-op ▪ Return to Sports expected in 4-6 months

Delaware Physical Therapy Clinic

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

Proximal Realignment Rehab Protocol		
Timeline	**Treatment**	**Milestones**
Week 1: Early Post-op Phase In immobilizer and using crutches for ambulation 2-3x/week Total Visits: 2-3	▪ 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)	▪ Full active quadriceps contraction with superior patellar glide ▪ Full passive knee extension ▪ WBAT in immobilizer (use crutches until safe without)
Weeks 2-6: Intermediate Post-op Phase In immobilizer or locked knee brace until week 4 for ambulation 2-3x/week Total Visits: 12-18	▪ Restore patellar mobility (clinic and home program), active and passive superior glide ▪ Incision site Desensitization (PRN) ▪ If flexion ROM is a concern, can use a hinged brace, locked during ambulation ▪ Gait Training: ○ **+quad lag** needs to be in immobilizer or locked knee brace and/or crutches ○ **-quad lag** can DC the immobilizer ▪ 4-6 weeks: Begin closed chain activities: i.e. partial wall squats	▪ Full knee extension and flexion to 90° by week 2 ▪ Knee flexion > 120° by week 6 ▪ SLR without quad lag by week 6 ▪ Ambulating without an immobilizer by week 6
Week 7-16: Late Post-op Phase 1-3x/week Total Visits: 20-36	▪ Resistive quad exercise may progress to angles greater than 30 – 40 degrees of knee flexion ▪ NMES may progress to angles greater than 30° ○ **No MVIC until 8 weeks**	▪ Full ROM ▪ Ambulation without a brace ▪ Running progression initiated when: quadriceps index ≥ 80%, ROM is full and patient is ≥ 12 weeks post-op