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**Rehab Practice Guidelines for:  
*Proximal Realignment Surgery***

Assumptions: Soft tissue healing for the proximal repair (4-6 weeks)

Primary surgery: Medial re-alignment of the VMO  
 Secondary surgery (possible): Limited lateral release

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**

Expected # of visits: 20-36 visits

<u>Week 1</u>	<u>Treatment</u>	<u>Milestones</u>
Early Post-Op Phase  In immobilizer and using crutches for ambulation  2-3 times / week  <b>TOTAL VISITS</b> 2-3 visits	Protected Electrical Stimulation Program Knee stabilized isometrically at 30 degree knee flexion  <b>Patella taped medially</b> Electrodes over proximal and distal quad ( <b>Do not place stim over the VMO, go proximal</b> )  10 second on/50 second off 10-15 contractions  Treat impairments Improve quadricep 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)
<b>TOTAL VISITS</b> 2-3 visits		

<p><b><u>Weeks 2-6</u></b></p> <p><b>Intermediate Post-op Phase</b></p> <p>In immobilizer or locked knee brace until week 4 for ambulation</p> <p>2-3 times / week</p> <p><b>TOTAL VISITS</b> 12-18</p>	<p>Incision Site Desensitization (PRN)</p> <p>Restore patellar mobility (clinic and home program), active and passive superior glide</p> <p>If flexion ROM is a concern, can use a hinged knee brace, locked during ambulation</p> <p>Gait training: + <b>quad lag</b> need to be in immobilizer or locked knee brace and/or crutches - <b>quad lag</b> can DC the immobilizer</p> <p>4-6 weeks: Begin closed chain activities: i.e.-partial wall squats</p>	<p>Full knee extension and flexion to 90° by week 2</p> <p>Knee flexion &gt; 120° by week 6</p> <p>SLR without quad lag by week 6</p> <p>Ambulating without an immobilizer by week 6</p>
<p><b><u>Weeks 7-16</u></b></p> <p><b>Late Post-Op Phase</b></p> <p>1-3 times / week</p> <p><b>TOTAL VISITS</b> 20-36</p>	<p>Resistive quad exercise may progress to angles greater than 30-40 degrees of knee flexion</p> <p>NMES may progress to angles greater than 30°</p> <p><b>No MVIC until 8 weeks</b></p>	<p>Full ROM</p> <p>Ambulating without a brace</p> <p>Running progression initiated when: quadriceps index <math>\geq</math> 80%, ROM is full and patient is <math>\geq</math> 12 weeks post-op</p>

**Considerations:**

1. Full functional return for ADL's expected in 3-4 months
2. No Burst testing and Functional Hop testing until 16 weeks post-op
3. Return to Sports expected in 4-6 months