The Gundersen Health System Sports Medicine PatelloFemoral Ligament Reconstruction / Repair Rehabilitation Program is an evidence-based and soft tissue healing dependent program which allows patients to progress to vocational and sport-related activities as quickly and safely as possible. Individual variations will occur depending on surgical details and patient response to treatment. Avoid ROM with chondrosis or pain when performing OKC knee extension strengthening exercises. If a lateral release is also performed, emphasis of patellar mobs should be on medial glides, inferior-medial glides, and medial tilts. Please contact us at 1-800-362-9567 ext. 58600 if you have questions or concerns.

### Phase I: 0-4 weeks

**ROM:**
- wk 0-1: 0
- wk 1-3: 0-90
- wk 3-4: 0-100

**WB:**
- Brace locked for ambulation.
- 2-4 wks unlock brace for WB depending on quad control
- wk 0-1: TTWB
- wk 1-2: 25%
- wk 2-3: 50%
- wk 3-4: 75%

**Modalities:**
- Cryotherapy 4x/day
- IFC for pain/effusion
- NMES quadriceps

**RX:**
- Recommendations:
  - Sapega-McClure technique:
    1. Active warm-up: Bike per ROM
    2. Heat in stretch: Prone hang 1<sup>st</sup> TERT
    3. Mobilizations / ROM:
      - PF mobs— avoid lateral glides
      - Scar tissue massage
    4. Therapeutic exercises:
      - Flexibility exercises:
        - Hams, Gastroc-soleus, Hip
        - Biofeedback QS w/ adductor squeeze, SLR
      - M<sub>1</sub> quad/hamstrings per ROM
      - Short arc quadriceps per ROM if no chondrosis
      - Hamstring isotonics per ROM
      - Hip 4 way SLR
      - Gastroc strengthening per WB
      - CKC leg press starting at 2 weeks per ROM and WB
      - Balance/proproprioection exercises per WB
    - CV conditioning, Core stability, Upper body exercises
  5. Ice in stretch: 2<sup>nd</sup> TERT
  6. HEP for 3<sup>rd</sup> TERT

**Updated 11/03**

### Phase II: 4-6 weeks

**ROM:**
- wk 4-5: 0-110
- wk 5-6: 0-120
- D/C brace

**WB:**
- wk 4-6: 100% with crutches
- D/C crutches depending on quadriceps control

**Modalities:**
- Cryotherapy
- IFC for pain/effusion
- NMES quadriceps

**RX:**
- Recommendations:
  - Sapega-McClure technique:
    1. Active warm-up: Bike per ROM
    5 wks add resistance to bike, Elliptical
    2. Heat in stretch: 2<sup>nd</sup> TERT
    3. Mobilizations / ROM:
      - PF mobs— avoid lateral glides
      - Scar tissue massage
    4. Therapeutic exercises:
      - Flexibility exercises: Hams, Gastroc-soleus, Hip, Quads
      - Biofeedback QS w/ adductor squeeze, SLR, CKC knee ext, minisquats, wall slide
      - Short arc quads/hams in ROM without chondrosis
      - Total leg strengthening
      - Hamstring isotonics
      - 6 wks sub-max OKC quads 0-45 w/ gradually increasing resistance
      - Hip 4 way SLR
      - Heel raises
      - Hamstrings isotonics
      - 8 wks quad isotonics 0-90
      - Isokinetic quad/hams in ROM without chondrosis
      - CKC exercises- leg press, step-ups, lunges, squats
      - Balance/proproprioection
      - CV conditioning, Core stability
      - 12 weeks Add impact activities if 75% strength

**Testing:**
- 12 wks Linea
  - 16 wks Linea, Biodex
  - 18-24 wks Linea, Biodex, FXN tests

**Return to Work/Sport**
- No pain or effusion
- Full ROM
- Isokinetic Strength- 90%
- Functional Tests – 90%
- MD approval
- Return to sports 4-6 months