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**REHAB PROTOCOL: Proximal (DFO) or Distal (TTO) Realignment +/- Medial Patellofemoral Ligament Reconstruction**

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Diagnosis:** \_\_\_\_\_

**Date of Surgery:** \_\_\_\_\_

**Phase I – Immediate Postoperative Phase (Day 1-5)**

- **Goals:**
  - Diminish swelling/inflammation (control hemarthrosis)
  - Diminish postoperative pain
  - Initiate voluntary quadriceps control
  - Independent ambulation
- **Brace:**
  - Brace for ambulation only (POD 1 to Week 4)
- **Weight-bearing:**
  - As tolerated with two crutches (approx. 50% WB)
- **Swelling/Inflammation Control:**
  - Cryotherapy
  - Compression bandages
  - Elevation & ankle pumps
- **Range of Motion:**
  - Full passive knee extension
  - Flexion to 45 deg(day 1-4)
  - Flexion to 6 deg (day 5)
  - PROM and gentle AAROM only
- **Flexibility**
  - Hamstring and calf stretches
  - PROM/AAROM within ROM limitations

**Phase II – Acute Phase (Week 2-4)**

- **Goals:**
  - Control swelling and pain
  - Promote healing of realignment tibial tuberosity
  - Quadriceps strengthening
- **Brace**

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- Continue brace for ambulation only
- Discontinue brace (week 4)
- **Weight-bearing:**
  - Progress WBAT (2 crutches for 4 weeks)
- **Swelling/inflammation:**
  - Continue use of cryotherapy
  - Compression bandage
  - Elevation
- **Range of motion:**
  - PROM/AAROM exercises
  - ROM 0-75 deg (week 1-3)
  - ROM 0-90 deg (week 4)
- **Muscle Retraining:**
  - Electrical muscle stimulation to quads
  - Quad setting isometrics
  - Straight leg raises (flexion)
  - Hip abduction/adduction
  - Hip extension
  - GENTLE submaximal isometric knee extension
  - **Week 4**
    - Light leg press
    - Vertical squats (no weight)
- **Flexibility:**
  - Continue hamstring, calf stretches

### Phase III –Subacute Phase “Motion” Phase (Week 5-8)

- **Goals:**
  - Gradual improvement in ROM
  - Improve muscular strength and endurance
  - Control forces on extension mechanism
- **Weight-bearing:**
  - One crutch (week 4-6)
  - Discontinue crutch (week 6)
- **Range of motion:**
  - PROM 0-115 deg
  - PROM 0-125 deg
  - PROM 0-125/135 deg
- **Exercises:**
  - Continue electrical muscle stimulation to quadriceps
  - Quadriceps setting isometric
  - Hip adduction, abduction, and extension
  - Vertical squats
  - Leg press
  - Knee extension light (0-60 deg)
  - Bicycle (week 6-8)
  - Pool program [walking, strengthening (when able)]
- **Flexibility**
  - Continue all stretching exercises for LE



**Phase IV –Strengthening Phase (weeks 9-16)**

- **Criteria to Progress to Phase IV**
  - ROM at least 0-115 degrees
  - Absence of swelling/inflammation
  - Voluntary control of quads
- **Goals:**
  - Gradual improvement of muscular strength
  - Functional activities/drills
- **Exercises:**
  - ½ vertical squats (0-60 deg)
  - Wall squats (0-60 deg)
  - Leg press
  - Forward lunges
  - Lateral lunges
  - Lateral step-ups
  - Knee extension (60-0 deg)
  - Hip adduction/abduction
  - Bicycle
  - Stairmaster

**Phase V –Return to Activity Phase**

- **Criteria to enter Phase V**
  - Full non-painful ROM
  - Appropriate strength level (80% or greater of contralateral leg)
  - Satisfactory clinical exam
- **Goals:**
  - Functional return to specific drills
- **Exercises:**
  - Functional drills
  - Strengthening exercises
  - Flexibility exercises

**Comments:**

**Frequency:** \_\_\_\_\_ **times per week**

**Duration:** \_\_\_\_\_ **weeks**

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

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