

High Tibial Osteotomy and Anterior Cruciate Ligament Reconstruction Rehabilitation Program

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 6)
- Weight-bearing
 - Toe-touch weight bearing with crutches x 6 weeks
- Swelling/Inflammation Control
 - Cryotherapy
 - Compression bandages
 - Elevation & ankle pumps
- Range of Motion
 - Full passive knee extension
 - Flexion to 45° (day 1-4)
 - Flexion to 60° (day 5)
 - PROM and gentle AAROM only
 - As tolerated –CPM for 2 hours, 3x daily, from 0-30° of flexion out of brace
- Flexibility
 - Hamstring and calf stretches
 - PROM/AAROM within ROM limitations

Phase II –Acute Phase (Week 2-8)

- Goals:
 - Control swelling and pain
 - Promote healing of realignment tibial tuberosity
 - Quadriceps strengthening
- Brace
 - Continue brace for ambulation only
 - Discontinue brace (week 8)
- Weight-bearing
 - Unlock brace for ambulation week 4
 - Toe-touch weight bearing with crutches x 6 weeks
 - Partial weight-bearing 6-8 weeks
 - Discontinue Crutches at Week 8
- Swelling/inflammation
 - Continue use of cryotherapy

- Compression bandage
 - Elevation
- Range of motion
 - PROM/AAROM exercises
 - ROM 0-75° (week 1-3)
 - ROM 0-90° (week 4)
- Muscle Retraining
 - Electrical muscle stimulation to quads
 - Quad setting isometrics
 - Straight leg raises (flexion)
 - Hip adduction/abduction
 - 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 9-11)

- 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°
 - PROM 0-125°
 - PROM 0-125/135°
- Exercises
 - Continue electrical muscle stimulation to quadriceps
 - Quadriceps setting isometric
 - Hip adduction, abduction, and extension
 - Vertical squats
 - Leg press
 - Knee extension light (0-60°)
 - Bicycle (week 6-8)
 - Pool program [walking, strengthening (when able)]
- Flexibility
 - Continue all stretching exercises for LE



Phase IV –Strengthening Phase (weeks 12-16)

- **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°)
 - Wall squats (0-60°)
 - Leg press
 - Forward lunges
 - Lateral lunges
 - Lateral step-ups
 - Knee extension (60-0°)
 - 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: _____