Lateral Release Protocol

Surgical Date: **Rehab Start Date:** Arthroscopy, Debridement, Lateral Release Rehabilitation Protocol PHASE 1: WEEKS 1-2 GENERAL OBSERVATIONS: 1/2 Weight Bearing when: Pain Controlled, Hemarthrosis Controlled, Voluntary Quadriceps **Contraction Achieved EVALUATION:** Pain Hemarthrosis • Patellar Mobility • **ROM Minimum** Quadriceps Contraction & Patella Migration Soft Tissue Contracture **RANGE OF MOTION:** ROM (Passive 0°-90°) • Patella Mobilization Ankle Pumps (Plantar flexion with resistance band) Hamstring, gastroc-soleus Stretches STRENGTHENING: Active Quadriceps Isometrics (Based on ROM limits) Active Hip Adductor Isometrics Knee Extension (Active-Assisted 90°-0°) Straight Leg Raise (Flexion, Extension, Adduction) CONDITIONING: UBC **MODALITIES:** Electrical Stimulation, Biofeedback, Cryotherapy GOALS: ROM 0° - 90° Adequate Quadriceps Contraction . Control Inflammation, Effusion . 50% Weight Bearing PHASE 2: WEEKS 3-4 GENERAL OBSERVATIONS: Full Weight Bearing when: Pain Controlled, Hemarthrosis Controlled, Voluntary **Quadriceps Contraction Achieved** EVALUATION: Pain Effusion Patellar Mobility ROM Minimum **Quadriceps Contraction & Patella Migration** Soft Tissue Contracture **RANGE OF MOTION:** ROM (Passive 0°-120°) Patella Mobilization Ankle Pumps (Plantar flexion with resistance band) Hamstring, gastroc-soleus Stretches STRENGTHENING: Active Quadriceps Isometrics (Based on ROM limits) Active Hip Adductor Isometrics Isometric Training: Multi-angle (0°, 60°) • Knee Extension (Active-Assisted 90°-30°) • Straight Leg Raise (Flexion, Extension, Adduction) • Calf Raises Closed-Chain (Cup Walk, Toe Raise, Mini-Squats (0°-30°)) AEROBIC CONDITIONING: UBC, Water Walking Electrical Stimulation, Biofeedback, Cryotherapy MODALITIES: GOALS: ROM 0° - 120° • Muscle Control

- Control Inflammation, Effusion
- Full Weight Bearing •

PHASE 3: WEEKS 5-6

GENERAL OBSERVATIONS: Full Weight Bearing when: Pain Control without Narcotics, Hemarthrosis Controlled, ROM 0°-110°, Muscle Control, Inflammatory Response

Surgical Date:

Rehab Start Date: _

Lateral Release Protocol

EVALUATION:

- Pain
- Effusion
- Patellar Mobility
- ROM (0°-135°)
- Quadriceps Contraction & Patella Migration
- Soft Tissue Contracture

RANGE OF MOTION:

- ROM (Passive 0°-120°)
- Patella Mobilization
- Hamstring, gastroc-soleus Stretches

STRENGTHENING:

- Straight Leg Raises (Ankle Weight not to exceed 10% of Body Weight)
- Isometric Training: Multi-angle (90°, 60°, 30°)
- Knee Extension with resistance (Active 90°-30°, patellofemoral precautions)
- Hamstring Curls (0°-90°)
- Calf Raises
- Closed-Chain (Wall Sits, Toe Raise, Mini-Squats (0°-30°))
- Multi-hip Machine (flexion, extension, abduction, adduction)
- Leg Press (70°-10°)

BALANCE TRAINING:

Weight Shift side/side and forward/back

Electrical Stimulation, Biofeedback, Cryotherapy

- Balance Board / 2 Legged
- Cup Walking with Crutches

AEROBIC CONDITIONING: (Patellofemoral Precautions)

- UBC
- Stationary Bicycling
- Water Walking

MODALITIES:

GOALS:

- ROM 0° 135°
- Muscle Control
- Control Inflammation, Effusion
- Full Weight Bearing
- Early Recognition Complications (Motion Loss, RSD, Patellofemoral)

PHASE 4 WEEKS 7-8

GENERAL OBSERVATIONS: Full Weight Bearing when: Pain Control without Narcotics, Hemarthrosis Controlled, ROM 0°-120°

EVALUATION:

- Pain
- Effusion
- Patellar Mobility
- ROM (0°-135°)
- Muscle Control (4/5)
- Inflammatory Response

RANGE OF MOTION:

- ROM (Passive 0°-135°)
- Patella Mobilization
- Hamstring, gastroc-soleus Stretches

STRENGTHENING:

- Straight Leg Raises (Flexion, Extension, Adduction)
- Straight Leg Raises (Rubber Tubing)
- Knee Extension with resistance (Active 90°-30°)
- Hamstring Curls (0°-90°)
- Calf Raises
- Closed-Chain (Lateral Step-Ups 2"-4", Wall Sits, Toe Raise, Mini-Squats (0°-30°))
- Multi-hip Machine (flexion, extension, abduction, adduction)
- Leg Press (70°-10°)

BALANCE TRAINING:

- Balance Board / 2 Legged
- Cup Walking with Crutches

Surgical Date: _____ Rehab Start Date: ____

AEROBIC CONDITIONING: (Patellofemoral Precautions)

- UBC
- Stationary Bicycling
- Water Walking
- Swimming (Kicking)
- Walking
- Stair Machine (Low Resistance, Low Stroke)
- Ski Machine (Short Stride, Level, Low Resistance)

MODALITIES: Cryotherapy

GOALS:

- ROM 0° 135°
- Muscle Control
- Control Inflammation, Effusion
 - Full Weight Bearing, Normal Gait

PHASE 5 WEEKS 9-12

GENERAL OBSERVATIONS: No Effusion, painless ROM, Joint Stability, Performs Activities of Daily Living (ADL),

Can Walk 20 minutes without Pain, ROM 0°-135°

EVALUATION:

- Pain
- Manual Muscle Test
- Patellar Mobility
- ROM (0°-135°)
- Crepitus
- Isometric Testing (%difference of quads & hams)
- Gait

RANGE OF MOTION: Hamstring, gastroc-soleus, quad, ITB Stretches

- STRENGTHENING:
 - Straight Leg Raises (Rubber Tubing)
 - Knee Extension with resistance (Active 90°-30°)
 - Hamstring Curls (0°-90°)
 - Closed-Chain (Mini-Squats (0°-40°)
 - Multi-hip Machine (flexion, extension, abduction, adduction)
 - Leg Press (70°-10°)

BALANCE TRAINING:

- Balance Board / 2 Legged
- Cup Walking with Crutches

AEROBIC CONDITIONING: (Patellofemoral Precautions)

- UBC
- Stationary Bicycling
- Water Walking
- Swimming (Kicking)
- Walking
- Stair Machine (Low Resistance, Low Stroke)
- Ski Machine (Short Stride, Level, Low Resistance)
- RUNNING PROGRAM: (5-6 months, straight, 30% deficit isometric test)
 - Jog (1/4 Mile)
 - Walk (1/8 Mile)
 - Backward Run (20yards)
- MODALITIES: Cryotherapy

GOALS: Increase strength and endurance

PHASE 6 WEEKS 13-26

GENERAL OBSERVATIONS: No Effusion, painless ROM, Joint Stability, Performs Activities of Daily Living (ADL), Can Walk 20 minutes without Pain

EVALUATION:

- Isometric Testing (%difference of quads & hams)
- Swelling
- Patellar Mobility
- Crepitus
- Single Leg Function Tests (9 months: hop distance, timed hop, %inv/uninv)

RANGE OF MOTION: Hamstring, gastroc-soleus, quad, ITB Stretches

Surgical Date: ___

Rehab Start Date: ____

STRENGTHENING:

- Straight Leg Raises (Rubber Tubing @ High Speed)
- Knee Extension with resistance (Active 90°-30°)
- Hamstring Curls (0°-90°)
- Closed-Chain (Mini-Squats (0°-40°)
- Multi-hip Machine (flexion, extension, abduction, adduction)
- Leg Press (70°-10°)

BALANCE TRAINING:

- Balance Board / 2 Legged
- Cup Walking with Crutches
- AEROBIC CONDITIONING: (Patellofemoral Precautions)

UBC

- Stationary Bicycling
- Water Walking
- Swimming (Kicking)
- Walking
- Stair Machine (Low Resistance, Low Stroke)
- Ski Machine (Short Stride, Level, Low Resistance)

RUNNING PROGRAM: (straight, 30% deficit isometric test)

- Jog (1/4 Mile)
- Walk (1/8 Mile)
- Backward Run (20yards)
- **CUTTING PROGRAM:** (20% deficit isokinetic test)
 - Lateral
 - Carioca
- Figure 8's
- FUNCTIONAL TRAINING:
 - Plyometric Training (20% deficit isokinetic test): box hops, level, double-leg
 - Sport Specific Drills (10%-15% deficit isokinetic testing)
- MODALITIES: Cryotherapy

GOALS: Increase Strength and Endurance, Maintain Strength and Endurance