

Leaders in Orthopaedic Health

DR. BUTKOVICH
MEDIAL PATELLOFEMORAL LIGAMENT RECONSTRUCTION
REHABILITATION PROTOCOL

OVERVIEW

- PATIENTS ARE WEIGHT BEARING AS TOLERATED
- CRUTCH USE AS NEEDED POST-OPERATIVELY FOR SAFETY AND TO MAINTAIN GOOD GAIT PATTERN AND POSTURE
- CAN WEAN TO SINGLE CRUTCH OR CANE USE, THEN TO NO AD ONCE ABLE TO WALK WITH NORMAL, SAFE GAIT PATTERN AND WITH CONFIDENCE IN INVOLVED LEG
- RANGE OF MOTION WILL BE LOCKED IN FULL EXTENSION IN TROM BRACE FOR 4 WEEKS
- IN THERAPY, PROGRESSION OF FLEXION FOR WEEK ONE IS 0-30 DEGREES, WEEK TWO 30-60 DEGREES, WEEK THREE TO FOUR PROGRESSING TO 90 DEGREES AND ADDING PROM TO 90 DEGREES IN HOME EXERCISE PROGRAM
- IMPORTANT NOT TO PUSH FLEXION PAST 90 DEGREES FOR FIRST 4 WEEKS TO PROTECT REPAIR
- **NO PATELLAR MOBILIZATION FOR 4 WEEKS.**
- REGULAR ATTENTION TO PROPER QUADRICEPS RECRUITMENT AND KNEE MECHANICS WILL OPTIMIZE OUTCOME
- RETURN TO SPORT AND ACTIVITIES ARE DEPENDENT UPON PASSING A FUNCTIONAL SPORTS TEST

PHASE I
WEEKS 1:

GOALS

- CONTROL PAIN AND SWELLING
- ACTIVATE QUAD
- PASSIVE RANGE OF MOTION 0-30 DEGREES

PRECAUTIONS

- WBAT WITH CRUTCHES AND KNEE IMMOBILIZER IN FULL EXTENSION

EXERCISES

- QUAD SETS
- ANKLE PUMPS
- STRETCHING OF HAMSTRINGS AND CALVES TO MAINTAIN EXTENSION ROM
- INITIATE SINGLE-LEGGED STANCE BALANCE/COORDINATION ACTIVITIES WITH FINGERTIPS ON STABLE SURFACE

PHASE II
WEEKS 2-4:

GOALS

- PROGRESS TO FWB WITH BRACE IN FULL EXTENSION
- PROM 0-60 DEGREES BY 2 WEEKS AND 0-90 BY 4 WEEKS

PRECAUTIONS

- GAIT WBAT WITH TROM LOCKED IN EXTENSION
- **NO** KNEE FLEXION BEYOND 90 DEGREES

EXERCISES

- QUAD SETS
- HEEL SLIDES
- ANKLE PUMPS
- SITTING KNEE FLEX MAXIMUM OF 90 DEGREES
- HEEL RAISES
- LEG RAISES IN ALL DIRECTIONS

PHASE III
WEEKS 4-6:

GOALS

- WALK NORMALLY WITH BRACE OPEN
- WEAN OFF BRACE AS ABLE
- PROM 0-105 DEGREES

PRECAUTIONS

- WEAN AND D/C TROM WHEN SAFE PER MD
- FWB-AVOID LIMP

EXERCISES

- BEGIN GENTLE PATELLAR MOBILIZATION/ INITIATE SCAR MOBILIZATION AFTER WEEK 4
- STATIONARY BIKE
- LIGHT LEG PRESS LESS THAN 90 DEGREES OF FLEXION
- QUAD SETS
- HEEL SLIDES
- SLR
- SAQ
- STEP-UPS
- PROPRIOCEPTIVE EXERCISE PROGRESSION
- ANKLE PUMPS
- HEEL RAISES
- POOL THERAPY ONCE INCISIONS WELL HEALED

PHASE IV
WEEKS 6-8:

GOALS

- FULL PASSIVE RANGE OF MOTION
- IMPROVE STRENGTH

PRECAUTIONS

- WALKING/STAIRS WITHOUT AD OR BRACE
- BRACE FOR SPORT PRN

EXERCISES

- CONTINUE PATELLAR MOBILIZATION
- STATIONARY BIKE
- PROPRIOCEPTIVE EXERCISE PROGRESSION
- FUNCTIONAL EXERCISES SHOULD FOCUS ON ECCENTRICS
- INCREASE INTENSITY OF EXERCISE RESISTANCE TRAINING
- POOL THERAPY

PHASE V
WEEKS 8-12:

GOALS

- INITIATE LATERAL MOVEMENTS

EXERCISES

- CONTINUE ALL EXERCISES WITH EMPHASIS ON CLOSED-CHAIN, FUNCTIONAL AND PROPRIOCEPTION PROGRAM
- ADD LATERAL MOVEMENT EXERCISES (LATERAL SETPPING/STEP-UPS, ETC.)
- INCREASE RESISTANCE OF CYCLING, STAIR MACHINE, AND POOL PROGRAMS

PHASE VI
WEEKS 12-16:

GOALS

- INITIATE SPORT SPECIFIC TRAINING
- INCREASE STRENGTH, POWER, AND CARDIOVASCULAR CONDITIONING

EXERCISES

- INITIATE RUNNING PROGRAM
- DEVELOP SPORT-SPECIFIC EXERCISES AND TRAINING PROGRAM
- MAXIMAL ECCENTRIC FOCUSED TRAINING
- BEGIN LIGHT RUNNING PROGRAM AS ABLE TO DEMONSTRATE GOOD STRENGTH AND MECHANICS

PHASE VII
4-6 MONTHS:

GOALS

- DEVELOP MAXIMAL STRENGTH, POWER, AND ADVANCED SPORT ACTIVITIES
- RESISTED CLOSED-CHAIN REHAB THROUGH MULTIPLE RANGES
- RUNNING PROGRAM, BALANCE DRILLS AND AGILITY PROGRAM
- INITIATE PLYOMETRICS
- RETURN TO SPORT AND ACTIVITIES ARE DEPENDENT UPON PASSING A FUNCTIONAL SPORTS TEST AND MD RECOMMENDATION