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MENISCUS REPAIR

(COMPLEX/ RADIAL/ LARGE PERIPHERAL) POST OPERATIVE PROTOCOL

Weight Bearing

- NWB x ____ wks
- TDWB x ____ wks
- PWB ____% x ____ wks
- WBAT
- Brace Locked in Ext x ____ wks

ROM

- Full ROM
- Locked full ext x ____ wks
- Locked at ____° x ____ wks
- ROM limits
 - ____° to ____° x ____ wks
 - ____° to ____° x ____ wks
 - ____° to ____° x ____ wks

CPM

- ____° to ____° x ____ wks
- 30-70° increase 10°/d @ dir
- None

Recommended Clinical Guidelines

WB: TDWB x 4-6 weeks
 ROM: 0-90 by week 6

Precautions:

No open chain hamstring curls until week 8

Estimated Return to Sport:

Phase I – Tissue Protection/Healing Phase (0-6 weeks)

GOALS:

- 1) Reduce pain
- 2) Reduce effusion
- 3) Achieve full knee extension ROM
- 4) Facilitate quadriceps activation

ROM:

PROM/AAROM/AROM (0-MD prescribed limit)
 Gastroc/Soleus/Hams/Quad stretch

EXERCISE:

Quad isometrics
 SLR flex/abd/ext
 Open chain knee extension (90°-45°)

MANUAL:

Patella Mobilization
 Scar mobilization

MODALITIES:

Functional Electrical Stimulation
 Cryotherapy

Criterion for Progression:

- 1) *Voluntary quadriceps isometric contraction*
- 2) *Full knee extension AROM*
- 3) *No extensor lag with SLR*
- 4) *Knee AROM 0°-90°*

Phase II – Tissue Proliferation Phase/Progression Phase (7-9 weeks)

GOALS:

- 1) Improve knee AROM
- 2) Strength progression- develop functional quad control
- 3) Normalize gait pattern
- 4) Minimize shear forces on knee

ROM:

PROM/AAROM/AROM (0-MD prescribed limit)
 Stationary Bike

EXERCISE:

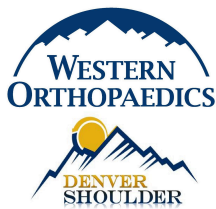
Standing weight shifting
 Wall/mini squats (0°-45°)
 Leg Press (60°-10°)
 Calf Raises
 Forward/Lateral step ups
 Single limb stance
 Single limb deadlifts
 Open/Closed chain hams curls to 90° (week 8)
 Gait training/ cone walking

MANUAL:

Continue PRN

MODALITIES:

Continue PRN



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Criterion for Progression:

- 1) **No effusion**
- 2) **Knee AROM 0-135**
- 3) **Full patellar mobility**
- 4) **Normalized gait pattern**

Phase III – Tissue Remodeling/Hypertrophy Phase (10-24 weeks)

GOALS

- 1) Full knee AROM
- 2) Improve eccentric quad control
- 3) Strength progression

ROM:

ROM to full

EXERCISE:

Progressive Resistance Exercise
Leg press to 90°
Single leg squats to 90°
Advanced single Leg balance/proprioception exercises
Lateral motion/stepping

CV Exercise:

Stairmaster/Climber
Swimming (week 12)

Criterion for Progression:

- 1) **No pain or edema/effusion**
- 2) **Full knee AROM**
- 3) **20 reps to 60 degrees single leg squat with eccentric control and good lower extremity alignment**
- 4) **Quad strength >80% of uninvolved LE (10RM single leg press or isokinetically if available)**

Phase IV – Sport Specific Training (weeks 8-12)

GOALS:

- 1) Begin sport specific drills
- 2) Begin running progression
- 3) Normalize neuromuscular control
- 4) Normalize jumping/landing mechanics if indicated
- 5) Gradual return to sport

EXERCISE:

Begin jogging progression
Begin agility progression
Begin plyometric progression
Begin sport specific strengthening

Criterion for Return to Sport:

(Recommend combination testing of strength, agility, and power according to available resources/clinic setting)³

- 1) **Lower Extremity Functional Test (LEFT)¹³**
- 2) **Hop Tests – Single Hop, X-Hop, Triple Hop, Timed Hop \geq 85% uninvolved^{1,6,8-11}**
- 3) **Single leg squat to 60 degrees knee flexion with good control for 3 minutes^{7,8,10}**
- 4) **Quad strength > 90% of uninvolved (10RM leg press or isokinetic testing)¹²**
- 5) **IKDC (MCID 6.3@ 6mo; 16.7 @ 12 mo)^{2,4,5}**