Meniscal Repair Post-Operative Protocol

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If you have any questions about this protocol or about the patient, do not hesitate to email Dr. Metzler at: ametzler@orthonky.com

Philosophy

The following is an outline of the post-operative rehabilitation program following meniscal repair procedures utilized by Dr Adam Metzler at Commonwealth Orthopaedic Centers and Sports Medicine. This protocol is to be utilized as a guideline. There will always be individual differences regarding progression and/or tolerance of specific activities**, including weight bearing status** for the first several weeks post operatively.

Progression through the protocol will depend on successful accomplishments of set milestones as assessed by the physician and physical therapist's confidence level. The physical therapist and patient must constantly be aware of changes in condition, including but not limited to signs and symptoms of joint irritation/pain, tendonitis, and effusion. The patient's home exercise program is of utmost importance and should be monitored and emphasized.

Remember, basic rehabilitation is nothing more than creating the optimal environment for the natural response of healing to occur without compromising function of tissue healing.

CONSIDERATIONS: Meniscal repairs located in the vascular zones of the periphery or outer third of the meniscus are progressed more rapidly than those repairs that are more complex and located in that avascular zone of the meniscus. Dependent upon the location of the repair, <u>post operative weight bearing status as well as the intensity and time frame of initiation of functional activities will vary.</u> **Please follow individual physician guidelines on the referral.**

CAUTION: Return to intense activities such as impact loading, jogging, deep knee flexion, or pivoting and shifting early post-operatively may increase the overall chance of a repeat meniscal tear and symptoms of pain, swelling, or instability should be closely monitored by the patient.

<u>Phase I: Weeks 0- 6</u>

GOALS OF PHASE:

Control pain and effusion
Achieve adequate quad/VMO contraction, no extensor lag
Independent in HEP
ROM 0-90 x 4 weeks than progress to full motion.

RESTRICTIONS:

WEIGHT BEARING- NWB x 4-6 weeks- per physician

BRACE-Locked at 0 degrees for first 4-6 weeks. Remove brace to perform NWB exercises

ROM- **Full ROM in NWB position (patient MUST work on motion and patellar mobility at least 2-3 times daily on days when not in rehab)**

- Active and Passive full knee flexion
- Patellar mobs
- Ankle pumps
- Gastoc/soleus stretch
- Hamstring/ITB stretch
- Prone hangs to facilitate extension
- Heel slides for flexion

STRENGTH- no loading past 90 degrees for 16 wks.

- Quad sets with E-stim
- SLR in 4 planes, supine/sidelying hip circles
- SAQ, prone knee extensions/TKEs
- Multi-hip machine in 4 planes
- Hip flexion-seated
- Multi-angle isometrics 0-60

IF RELEASED FOR WBAT may add as appropriate: heel raises, wt. shifting, line walking, single leg balance; if adequate quad control and released to unlock in WB: 0-60 degree leg press (high rep, low weight), wall slides, total gym mini squats.

FOR ADVANCED PATIENT/ATHLETES: UBE, UE wt lifting, core strengthening may be done if it does not load LEs

MODALITIES

E-stim and cryotherapy as needed

<u>Phase II: Weeks 7-12</u> Be aware of changes in condition (such as pain and effusion) and modify program as indicated

GOALS OF PHASE:

Full ROM
Adequate quad/VMO contraction
Control pain and effusion
PWB to FWB with quad control. Brace as referred by physician.
Ambulate with good control of knee and no deviations.

ROM

Active and passive ROM 0-120-Patellar mobs
Continue stretches as previous
Scar Massage

STRENGTH- no loading flexion past 90 for 16 wks.

Continue previous exercises as indicated.
Monster walk add variations
Heel-toe walking, cone stepping to Dynamic warm-up
Leg Press, Total gym (0-60) or Reformer
Wall squats
Lateral step down
Stationary bike (as motion available-do not force)
Mini-squats/squats (0-90)
Hamstring curl (0-90)
Leg Press (0-90)
Lunges-knee not to migrate over toe
Begin light circuit training - Stepper, Nordictrack, treadmill, ladder drills

BALANCE TRAINING- add WB exercises to above if NWB until now

Cone walking
Mini squat with UE or LE reach (rock around the clock)
Single leg balance with plyotoss or other challenge
Sports cord agility work
Wobble board work

MODALITIES

Cryotherapy as needed

<u>Phase IV: Weeks 13+</u>

GOALS OF PHASE:

- **Enhance neuromuscular control**
- **Perform selected sports specific activity and release per MD to unrestricted sporting activity**
- **Achieve maximal strength and endurance**

FUNCTIONAL TRAINING

- Initiate light plyometric/sportsmetric type program (as released by MD for impact loading)
  - box jumps, level, double-leg, rope jumping, star jumps, hopping
- Sport specific drills
- Intensify circuit training - Stepper, elliptical, treadmill, ladder drills, rope jumping, reaction drills

RUNNING PROGRAM

- Water walking
- Swimming (kicking)
- Backward run
- Eventual return to jogging if patient is tolerating plyometrics

CUTTING PROGRAM

- Lateral shuffle
- Carioca, figure 8's
- LEFTest run

MODALITIES

- As needed

Advanced weight training and sports specific drills are advised to maintain a higher level of competition

AVOID IMPACT ACTIVITIES (running, jumping etc) x 3 MONTHS AND PREFFERABLY 4 MONTHS

AVOID DEEP SQUATS PAST 90 DEGREES x 4 MONTHS