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WOODSON ACL RECONSTRUCTION DELAYED REHAB PROTOCOL

General Info:

This is a list of general guidelines for a <u>delayed</u> ACL reconstruction rehab program. These guidelines may change based on fixation, condition of repaired tissue, variations in surgical procedures, age, and patient's response to treatment. Please call our office if there are any questions.

Post-Op Weeks 1-2: Phase I

- ROM: (passive)
 - o Meniscus repair, MCL, ACL revision: 0-90°
 - o Patellar realignment: 0-75°
- Flexibility:
 - o Patellar mobs
 - o Ankle pumps
 - o Gastroc-soleus stretches
 - o Heel slides with towel
 - o wall slides
- Brace and Crutch Use:
 - o Remove brace to perform ROM activities
 - o I-ROM when walking with crutches
 - o Weight-bearing:
 - Meniscus repair: non-weight bearing (NWB)
 - MCL: weight bearing as tolerated (WBAT)
 - ACL revision: WBAT
- Strengthening:
 - o Quad sets with biofeedback 10 min (10" holds, 30 reps, 10x daily)
 - o SLR flexion and abduction
 - Heel raise/toe raise
 - o Wall squats
- Modalities:
 - o Electrical stimulation as needed (NMES, TENS)
 - \circ Ice 15-20 mins with knee at 0° extension

Post-Op Weeks 2-4: Phase II

- ROM: (passive up to 90°)
- Flexibility:
 - o Patellar mobs
 - Ankle pumps
 - o Gastroc-soleus stretches
 - Heel slides with towel
 - Wall slides
 - o Light hamstring stretch (week 4)
- Brace and Crutch Use:
 - o I-ROM when walking with crutches



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- Strengthening:
 - o Multi-angle isometrics (90°-60°)
 - o Quad sets with biofeedback 10 min (10" holds, 30 reps, 10x daily)
 - o SLR flexion, adduction, and abduction
 - Heel raise/toe raise
 - Wall squats
- Modalities:
 - o Electrical stimulation as needed (NMES, TENS)
 - o Ice 15-20 mins with knee at 0° extension
- Balance Training:
 - o Weight shifts (side \rightarrow side, forward \rightarrow backward)
 - o Single leg balance (dependent upon procedure)

Post-Op Weeks 4-6: Phase III

- ROM: (passive up to 125°)
- Flexibility:
 - o Gastroc-soleus stretches
 - Heel slides with towel
 - Wall slides
 - o Light hamstring stretch (week 4)
- Crutches and Brace:
 - o Measure for functional brace
 - o DC crutches when full-weight bearing (FWB) allowed
- Weight bearing:
 - o PWB to FWB as allowed by quadriceps control
 - o Discharge I-ROM with issuance of functional brace
- Strengthening:
 - o Progressive isometric program
 - o Straight leg raises in 4 planes with ankle weights/tubing
 - o Heel raise/toe raise
 - o Mini-squats/wall squats
 - o Initiate isolated hamstring curls
 - o Multi-hip machine in 4 planes
 - o Leg press, double-leg eccentric
 - o Initiate bike with 110° flexion
 - o EFX/Retro treadmill
 - o Lateral/forward step-ups and step-downs
 - o Lunges
- Modalities:
 - o Ice 15-20 minutes following activity
- Balance Training:
 - o Single leg stance
 - Weight shift
 - o Balance board work, double-legged
 - o Cup walking/hesitation walking



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Post-Op Weeks 6-12: Phase IV

- ROM: (passive up to 135°)
 - o Gastroc-soleus stretches
 - o Light hamstring stretch
- Brace:
 - o Functional brace as needed
- Strengthening:
 - o 6-10 weeks:
 - Continue all exercises from 4-6 weeks
 - Leg press-single leg eccentric
 - Lateral lunges
 - 10-12 weeks:
 - Continue exercises from 4-10 weeks
 - Initiate jogging protocol; start on mini-trampoline and progress to treadmill
 - Progress with proprioception training
 - Walking program
 - Bicycle for endurance
- Modalities:
 - o Ice 15-20 minutes following activity
- Balance Training:
 - o Two-legged balance board
 - o Single-leg stance with plyo-toss
 - o Cup walking
 - o ½ foam roller work

Post-Op Weeks 12-16: Phase V

- ROM: continue all stretching exercises
- Strengthening:
 - o Continue exercises from 4-12 weeks
 - o Initiate plyometric training drills
 - o Progress jogging/running program
 - o Initiate isokinetic training (90°-30°, 120°-240°/second)
- Modalities:
 - o Ice 15-20 minutes as needed

Post-Op Weeks 16-20: Phase VI

- ROM: continue all stretching exercises
- Strengthening:
 - o Continue all exercises from previous phases
 - o Progress plyometric program
 - o Increase jogging/running program
 - o Swimming (with kicking)
 - o Backward running
- Functional Program:
 - Sport specific drills



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- Cutting Program:
 - o Lateral movement
 - o Carioca, figure 8's
- Modalities:
 - o Ice 15-20 minutes as needed

Post-Op Weeks 20-36: Phase VII

- ROM: continue all stretching exercises
- Strengthening:
 - o Continue advanced strengthening
- Functional Program:
 - o Progress running/swimming program
 - o Progress plyometric program
 - o Progress sport training program
 - o Progress neuromuscular program
- Modalities:
 - o Ice 15-20 minutes as needed