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CAPITAL PERFORMANCE SURGERY

REHABILITATION PROTOCOL

ACL Reconstruction +/- meniscal procedure

Instructions for Physiotherapist:

EQUAL ICING AND REST/WORK RATIO IS IMPORTANT. SIGNIFICANT PAIN SHOULD NOT OCCUR WITH ANY ACTIVITY DURING REHAB WORK OR LAST LONGER AFTER REHAB. IF THIS OCCURS, MODIFICATION OR RE-EVALUATION NEEDS TO BE UNDERTAKEN.

Dressings and sutures:

- The dressings on your leg should be left in place and kept dry when showering for 3 days.
- After 3 days you can remove your dressings and shower normally but do NOT scrub the incisions.
- Apply Band-Aids over the incisions to keep them clean once the initial dressing has been removed.
- If sutures/staples were used, they will be removed at your first post-op visit (approx. 2 weeks post-op).
- Do NOT soak the leg (i.e. hot tub / bath, etc) until 2-4 weeks after your sutures are removed and the incisions are well healed.

Pain and swelling:

- Local anesthetic has been placed into your knee – this will wear off in 6-8 hours after surgery.
- You have been provided with a prescription for pain medications that when used together will provide the most effective pain relief after your surgery.
- Use an ice pack or cold therapy delivery system for 20 mins every hour while awake to help with pain and swelling.
- It is common to have some spotting through the dressings following surgery. Place an additional dressing over the area if this occurs.
- The incisions may continue to "leak" fluid after removal of the initial dressing – this is common and should not raise concern. Place an additional bandage or Band-Aids over the incisions to help them heal. Keep the incisions clean and dry.
- DO NOT apply any ointments or topical creams to the incisions until they are completely healed – this will risk the incisions becoming infected.
- When sitting or lying, keep your leg elevated with several pillows placed under the ankle (not the knee) to help decrease swelling and relieve pain.

Red flags:

- Complications after arthroscopic surgery are very rare but can occur. If you develop any of the following symptoms go to your nearest emergency department for assessment:
    - Increasing calf pain / swelling that does not improve with elevation and ice
    - Shortness of breath
    - Chest pain

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Phase 1 (0-6 weeks)

Goals:

- Protect graft and graft fixation and minimize effects of immobilization.
- Obtain minimum **0-90 degrees motion by 2 weeks** and full range of motion by 6 weeks
- Control inflammation/swelling
- Restore normal heel-to-toe gait on level surfaces

Weight Bearing:

- **IN GENERAL:** as tolerated with crutches; wean crutches by 2-4 weeks as normal gait is restored*
    - *If your surgeon performed a **meniscus root repair** **or** **repair of a radial tear**, then you should remain foot flat feather weight bearing for 6 weeks (this means that you may place your foot on the ground when using crutches but avoid weight bearing on the side of the surgery).
    - *If your surgeon performed a **meniscus transplant** **or** **cartilage procedure**, then you should remain foot flat feather weight bearing for 6 weeks.

Range of Motion:

- ROM from 0-90 degrees first 2 weeks without weight bearing.
- AAROM → AROM as tolerated
- Maintain full knee extension; work progressively on knee flexion.

Suggested Exercises:

- Patella mobilization and scar mobilization.
- Quad/Hamstring sets
- Heel slides
- Non-weight bearing stretching of the Gastroc/Soleus and Hamstrings
- Straight-Leg Raise with brace in full extension until quad strength prevents extension lag
- Begin to use stationary bicycle with low/no resistance by week 6

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☐ Phase 2 (6-12 weeks)

Criteria for advancement to Phase 2:

- Full extension and minimum of 90 degrees flexion
- Good quad set, SLR without extension lag
- Minimal swelling/inflammation and normal gait on level surfaces

Goals:

- Restore normal gait with stair climbing
- Maintain full extension, obtain final degrees of full flexion range of motion
- Protect graft and graft fixation
- Increase hip, quadriceps, hamstring and calf strength and proprioception

Weight-Bearing:

- As tolerated – discontinue crutch use by 6 weeks

Range of Motion:

- Full, painless ROM

Suggested Exercises:

- Continue and progress all exercises from Phase I
- Continue closed kinetic chain strengthening as above
- Progress to one-leg squats, leg press, partial lunges, deeper wall sits
- Stairmaster (begin with short steps, avoid hyperextension) and elliptical machine
- Stationary bike – progress time and resistance; progress to single leg bicycling
- If available, begin pool running (waist deep)
- Single leg balance, proprioception work

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Phase 3 (3-4 months)

Criteria for advancement to Phase 3:

- No patellofemoral pain and minimal swelling/inflammation
- Minimum of 120 degrees of flexion
- Sufficient strength and proprioception to initiate running

Goals:

- Full range of motion
- Improve strength, endurance and proprioception to prepare for sport
- Avoid overstressing the graft and protect the patellofemoral joint
- Normal running mechanics
- Strength approximately 70% of the uninvolved lower extremity
- Thigh circumference should be approaching that of the non-operative side (measure with a measuring tape) – a good indication of quad strength.

Suggested Exercises:

- Continue flexibility and ROM exercises as appropriate for patient
- Knee extensions 90°- 30°, progress to eccentrics.
- Full weight-bearing running in a straight line; no pivoting until 4 months post-op and equal quadriceps circumference and strength
- Begin swimming if desired
- Progressive hip, quadriceps, hamstring, and calf strengthening
- Cardiovascular/endurance training with Stairmaster, elliptical, and stationary bike
- Advance proprioceptive activities

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☐ Phase 4 (4-6 months)

Criteria for advancement to Phase 4:

- No significant swelling/inflammation with full, pain-free ROM
- No evidence of patellofemoral joint irritation
- Strength at least 70% of uninvolved lower extremity by 4 months
- Sufficient strength and proprioception to initiate agility activities
- Normal running gait

Goals:

- Symmetric performance of basic and sport specific agility drills
- Single hop and 3 hop tests 85% of uninvolved lower extremity
- Quad and hamstring strength at least 85% of uninvolved LE Exercises.
- Continue and progress flexibility and strengthening program

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☐ Phase 5 (6-9 months)

Criteria for advancement to Phase 5:

- No patellofemoral or soft tissue complaint
- Necessary ROM, strength, endurance, and proprioception to return
- Physician clearance to resume partial or full activity

Goals:

- Safe return to athletics/work
- Maintenance of strength, endurance, proprioception
- Patient education with regards to any possible limitations

Exercise:

- Sport-specific training program
- Gradual return to sports participation after 9 months
- Our ultimate goal is to have you back to your pre-injury level by 9-12 months
- Maintenance program for strength and endurance