Hendricks Regional Health
ORTHOPEDICS

HENDRICKS ORTHOPEDICS
& SPORTS MEDICINE
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Postoperative Rehabilitation Protocol for PCL Reconstruction
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Schedule Guidelines:

a. Follow Up with Surgeon:
   i. **2 weeks** post-op via a telemedicine visit. Please send updated PT notes to surgeon on last visit before telemedicine visit. Pt will be submitting on their own a picture of the incision via their EMR portal day before surgery. Fax therapy notes to (317) 718-2676
   i. **6 weeks** in person with the surgeon. Please send therapy notes before follow-up appt.

b. **Suture Removal**: Therapist to remove portal sutures at days 10-14.
   i. Apply steri-strips over portal after removing sutures.

GENERAL GUIDELINES

- Program is designed to protect the PCL
- Assume 12 weeks graft to bone healing time
- Caution against posterior tibial translation (gravity, muscle action)
- PCL with posterolateral corner or LCL repair follows different post-op care, i.e. crutches x 8 weeks and brace to avoid varus stress

GENERAL PROGRESSION OF ACTIVITIES OF DAILY LIVING

Patients may begin the following activities at the dates indicated (unless otherwise specified by the physician):

- Showering-once dressing removed; no immersion until stitches/staples removed and wounds healed
- Sleep without brace-8 weeks post-op
- Driving: when safely able to operate the controls of the vehicle. Any time for left knee surgery (assuming automatic transmission) and longer for right leg surgery
- Full weight bearing without assistive devices – 6 weeks for just PCL, but need 8 weeks when any lateral side surgery is also performed. Progress weight bearing at 25% per week for 4 weeks

PHYSICAL THERAPY ATTENDANCE

The following is an approximate schedule for supervised physical therapy visits:

- Formal PT begins 6 weeks post op. There will be two initial visits with PT one to begin QS/SLR(3 days post op), and a second to begin PROM flexion at at 3 weeks post op.
- 3 times a week is optimal
- Home exercises daily as instructed by therapist

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- Supervised physical therapy takes place for approximately 3-5 months post-op

Phase I (post-op day 1 to 6 weeks post op)

Begins immediately following surgery and lasts approximately one month. Patient is to perform ROM exercises and hip, knee, and ankle strengthening as directed daily.

Goals:

- Protect healing bony and soft tissue structures
- Minimize the effects of immobilization through:
  - Early protected range of motion (protect against posterior tibial sagging)
  - PRE's for quadriceps, hip and calf with emphasis on limiting patellofemoral joint compression and posterior tibial translation
- Patient education for a clear understanding of limitations and expectations of the rehabilitation process

Brace:

- 0-3 weeks brace on at all times except to shower fixed at 0 degrees
- 3-6 weeks post-op the brace is unlocked for passive range of motion to 60 degrees with patients instructed in passive flexion and active knee extension to prevent posterior tibial translation

Weight bearing status

- TTWB with crutches, brace is locked at full extension for 6 weeks.

Special Considerations

- Pillow under proximal posterior tibia at rest to prevent posterior sag

Therapeutic Exercises:

0-2 weeks

- Hip flexion, extension, abduction and adduction as able in brace.
- Straight leg raises for quads in brace.
- **FULL KNEE EXTENSION IS OBTAINED (EQUAL TO CONTRALATERAL SIDE)**

Add at first post-op visit 2 weeks out:

- Calf press with theraband
- 3-6 weeks post-op the brace is unlocked for passive range of motion to 60 degrees with patient instructed in passive flexion and active knee extension to prevent posterior tibial sag

PHASE II: (6 – 12 weeks post op):

Begins at 6 weeks post-op and extends to the 12th week post-op. **NO ACTIVE KNEE FLEXION** until 8 weeks post op

Goals:

- Increase range of motion
- Progress in weight bearing
- Continue lower extremity muscle toning (except active hamstring work)
- Continue to protect graft(s)

Brace and weight bearing status:

- Patient begins progressive weight bearing in brace
  - Week 6 – 25% with brace locked at 0
  - Week 7 – 50% with the brace at 0-30 degrees
  - Week 8 - 75% with the brace at 0-45 degrees
  - Week 9 – WBAT with brace at 0-90 degrees

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- Brace in place until full weight bearing is attained and good quad control is demonstrated.

Therapeutic Exercises:

6 -8 weeks: When patient exhibits independent quad control, may begin open chain extension

- Begin isometric quads and co-contraction of quads/hams in extension only, progress to active knee extension as tolerated from point of maximal flexion (passively) to full extension.
- Progress to mini-squats when able to be full weight bearing
- May begin or continue hip flexion/extension/abduction/adduction with knee fully extended
- While pool therapy is not routinely prescribed, if facility has pool then this is allowed the first month. Ambulation in pool—work on restoration of normal heel-toe gait pattern in chest deep water

8-12 weeks: If good quad control then you can begin light closed chain activities

- Begin light knee flexion, starting with sidelying, HS in supine with slide board. With initial hamstring firing and motion, progress with therapist assist and anterior drawer pressure to assess posterior tibial translation.**
- Full weight bearing at 8-10 weeks post op with no assistive device

6-12 Weeks: Once patient is full weight bearing and does not require the brace, therapy, can be liberalized and proceed on a more "as tolerated" basis

- Stationary bike: foot is placed forward on the pedal without use of the toe clips to minimize hamstring activity. Seat slightly higher than normal.
- Closed kinetic chain terminal knee extension utilizing resistance band while standing or weight machine. For leg press, knee flexion should be limited to 90' during exercises
- Stairmaster and/or elliptical machines can be used for cardio and leg conditioning
- Balance and proprioception activities (e.g. single leg stance or mini trampoline)

**** It is important to avoid open-chain hamstring activity during this period as this may cause posterior tibial translation and may stretch the graft****

PHASE III: (12 weeks – 9 months)

Begins approximately 3 months post-op and extends to nine months post-op. Expectations for advancement to Phase III:

Goals:

- Restore any residual loss of motion that may prevent functional progression
- Improve functional strength and proprioception utilizing closed and/or open kinetic chain exercises
- Continue to work on restoration of functional progression of the extremity and the patient as a whole in preparation for return to activity or sports

Therapeutic Exercises:

- Continue lower extremity exercise progression
- Treadmill walking progress to running as tolerated
- Stairmaster/elliptical trainer, swimming is OK (no breast stroke)
- May progress to outdoor biking, walking and ultimately running
- May play golf or bowling if able
- No twisting, turning, and jumping activities yet

PHASE IV:

Return to sport at approximately 6-9 months

Goals:

- Safe and gradual return to work or athletic participation
- This may involve sports specific training, work hardening, or job restrictions as needed

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- Maintenance of strength, endurance and function
- Running progression
- Figure 8, carioca, backward running, cutting
- Jumping (plyometrics) if needed for sport (i.e. volleyball or basketball)

******These instructions are not to be used as general guidelines. Before 3 months it is important not to go any faster even if the patient seems able, since the most important consideration is graft protection. Please have physician contacted if there are questions or concerns******