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Posterolateral Corner Reconstruction with Allograft

Name									Date							
Procedure _																
Procedure	Dat	e														
Frequency	1	2	3	4	5	times/week	Duration	1	2	3	4	5	6	weeks		

Range of motion is an important progression of therapy, but limiting swelling is important. Respecting swelling will decrease pain and improve motion.

Procedure

The popliteus tendon, the popliteofibular ligament, and fibular collateral ligament are reconstructed. This protocol can be combined with cruciate reconstruction protocols adhering to all restrictions for each protocol.

Postoperative Restrictions

1. Patient remains in the knee immobilizer in full-knee extension at all times during the first 6 weeks postoperatively other than when working on knee range of motion (ROM) or performing quadriceps exercises.

2. Patient remains non-weight bearing for 6 weeks. NWB 0-2 weeks postop, Toe touch / 25% body weight weeks 3-4 postop, 25-50% body weight weeks 5-6 postop, and FWB with cane support weeks 7-8, progressing to FWB by week 9.

3. Patient to avoid tibial external rotation, and external rotation of the foot/ankle, especially in sitting for the first 4 months postoperatively.

4. Patient avoids open-chain hamstring exercises until 4 months postoperatively. (Noyes indicates is ok to do weeks 9-12 up to 90 degrees)

Postoperative Red Flags

Signs and symptoms of infection (excessive swelling, fever greater than 101°, increasing redness around the surgical incisions) calf swelling, calf tenderness, lack of full knee extension, complaints of knee instability, complaints of catching or locking, and increased effusion following activity/therapy. If any of these red flag arise, contact MD.

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Phase 1:

Weeks 1-2

- Edema management: ice, compression, elevation
- Quadriceps sets and straight leg raises (SLRs) performed in the knee immobilizer.
- Quadriceps sets can be performed hourly up to 30 repetitions and SLR up to 30 repetitions 4 to 5 times per day.
- Four times a day gentle passive and active assisted ROM exercises. Goal is 90° of knee flexion by the end of 2 weeks, and 0° of knee extension.
- Core (lumbopelvic and hip) stabilization exercises in knee immobilizer that do not increase knee forces in varus, hyperextension, or tibial external rotation.

Weeks 3-6

- Continue with passive and active assisted ROM exercises 4 to 6 times per day. Patient should achieve full extension at this time, and 120° of flexion.
- Continue with quadriceps sets and SLRs.

Phase 2:

Weeks 7-12

- Start partial weight bearing using crutches. Goal is to ambulate full weight bearing without crutches within 2 weeks. Patient must be walking without a limp to discharge crutches. Discontinue knee immobilizer if able to perform SLR without a knee extension lag.
- Initiate use of stationary exercise bike if 105° of knee flexion ROM is achieved. Working on motion, beginning with 5 minutes every other day and increasing to 20 minutes daily, based on the knee's response to increased activity. If soreness or effusion is evident reduce time or days utilizing the bike.

Weeks 13-16

- At this time the patient should have a normal gait pattern, without the presence of a limp or Trendelenburg sign.
- The physician should be notified if patient is lacking 5° (or more) of extension or has less than 110° of flexion.
- Leg press up to 25% of the patient's body weight to fatigue. Knee flexion allowed to a maximum of 70°.
- Squat rack/squat machine: using weight up to 50%, body weight 10 repetitions, again not exceeding 70° of knee flexion. Slow progression to full body weight.
- Closed kinetic chain exercise progression: double-limb squatting, lunges, single-limb squatting, etc. All exercises performed with less than 70° of knee flexion.
- Daily biking or swimming. If swimming, no whip-kicks or flip turns.

Phase 3: Weeks 16-24 Physical therapy goals: improve quadriceps strength and function, increase endurance, improve coordination, and improve proprioception.

- Walking program: 20 to 30 minutes daily with a medium to brisk pace. Add 5 minutes per week.
- Resistance can be added to bicycling as tolerated. Biking done 3 to 5 times per week for 20 minutes, and the lower extremities should feel fatigued post biking.
- Advanced closed kinetic chain exercise progression: addition of unstable surface, movement patterns, resistance, etc.
- Return to run program once patient is able to perform 20 repetitions of involved lower extremity single-limb squatting to greater than 60° of knee flexion with good control. It is important to point out that other authors (Noves) report not to start running program until month 9th, so functional testing may be required to start running. As with ACL protocol, Dr. Levenda would like a gradual running program such as Delaware running program.
- Plyometric progression: supported jumping, jumping, leaping, hopping, etc.

Week 28 and beyond

Goal: achieve maximum strength of operative extremity.

- Maintain home exercise program 3 to 5 times per week.
- Physician will give clearance for cutting and pivoting and sports simulation activities as appropriate. Physician clearance is based on favorable outcomes with imaging studies, clinical exam findings, and functional progression with therapy. The coordination of care between the surgeon and physical therapy staff is critical for a complete assessment of patient function and a complete recovery from the surgery.

**Functional testing often performed at this time. A progressive return-to-play program is initiated if the limb symmetry index is greater than 85% with functional testing and satisfactory varus stress radiographs.

Comments:

FCE Work Conditioning/Work Hardening Teach HEP

Every patient's therapy progression will vary to a degree depending on many factors. Please use your best clinical judgment on advancing a patient. If other ideas are considered to improve patient's outcome do not hesitate to call.

Patient's recovery is a team approach: Patient, family/friend support, therapist, and surgeon. Every team member plays an important role in recovery.

Signature Date

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