

THE PORTLAND KNEE CLINIC

Orthopedic Surgeons Specializing in the Knee
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Arthroscopically Assisted Reconstruction of the Anterior Cruciate Ligament (ACL) using opposite side Patellar Tendon Graft.

Rupture of the anterior cruciate ligament (ACL) is one of the most common and disabling injuries to the knee. Without a functioning ACL, the knee joint shift abnormally when activities such as jumping, running and cutting are attempted. Each time the knee shifts abnormally, the menisci (shock absorbers), joint surfaces or other ligaments can be damaged. Once the ACL is completely torn, it usually does not heal properly. Reconstruction (rebuilding) of the ACL is generally necessary.

The patellar tendon (tendon below the kneecap) is a common structure used to reconstruct the torn ACL. In this surgical approach, a portion of the tendon and the attached bone is used to replace the torn ligament. This can be done using a part of the patellar tendon from the injured knee or from the opposite (non-injured) knee. When the ACL graft is taken from the opposite (non-injured) knee, recovery is accelerated because rehabilitation is divided between the two knees. The rehabilitation of the graft (donor) knee focuses on high repetition isometric strengthening exercises while the rehabilitation for the ACL reconstructed knee focuses on decreasing swelling, maintaining extension and leg control. With dedicated rehabilitation, the return to full activities is typically quicker when the opposite side graft is used (compared to the same side graft).

REHABILITATION

The success of your surgery depends on how well you follow your rehabilitation. The exercises provided in this sheet will cover the rehabilitation during the first week after surgery. Typically, you will start working with a physical therapist 1-2 weeks after the surgery.

- * You will be provided with a prescription for pain medication. Patients typically need this medication between zero and five days.
- * Additionally, take two Aleve twice daily for the first week. This over-the-counter medication can be taken in combination with the prescription pain medication. The Aleve will help minimize pain and swelling.
- * You will leave the surgical center with a knee immobilizer (on the reconstructed ACL side) and crutches. You should use both of these when up until instructed otherwise at the first post-op appointment.
- * Surgical thigh-high stockings will be placed on your legs at the end of surgery. Keep these on until the first post-op visit.
- * Activity – stay off your feet as much as possible. For the first 5 days, you should only be up to use the restroom. Keep your legs elevated above your heart as much as possible.
- * You can put full weight as tolerated both legs.
- * You will be sent home with a Cryo Cuff (icing machine). This is to be used predominately on the reconstructed ACL knee. If you want to ice the other knee, you can use a bag of ice or freezable gel packs (which can be purchased at any pharmacy).

John J. O'Shea, MD / Lisa Andersen, PA-C 503-238-1062 Day or Night

RECONSTRUCTED ACL KNEE

First week after surgery: major emphasis is to maintain full extension, minimize swelling, and regain good leg control.

- * Use Cryo Cuff (icing machine) when elevating your leg. The top strap should be snug and the bottom strap should be loose.
- * Range of motion activities: These should be done every 3-4 hours when awake
- * **Full Extension: MOST IMPORTANT** range of motion exercise in the first week. Full extension is defined as being able to straighten leg equally to the opposite leg. This should be achieved (and maintained) by the morning following surgery. Prop your heel on the Cryo Cuff canister. Press down on your thigh. Hold for 20-30 seconds.
- * Assisted knee bends. Have someone bend your knee as far as tolerated. Hold this for 20-30 seconds. Increase the flexion (bend) each day. Goal is to have at least 90 degrees of flexion by the end of the first week.
- * Strengthening exercise: every 3-4 hours when awake
- * Straight leg raise: while lying on your back, tighten your front thigh muscle and raise it 12 inches. Repeat 10-15 times.

ACL GRAFT KNEE

First week after surgery: begin the isometric strengthening process to accelerate the regrowth of the patellar tendon. You will be temporarily provided with a knee shuttle (rehabilitation equipment) with resistance bands to strengthen the quadriceps. Directions on how to use the shuttle will be provided in your pre-operative office visit or on the day of surgery. In the rehabilitation process, the return of strength of this leg determines when a person can get back to activities without restrictions.

- * You should have full range of motion of the knee after surgery. Gentle bending exercises (fully extend knee and then bend knee as far as able) should be done at least 3-4 times daily.
- * Begin the isometric strengthening exercises the morning after surgery. Start initially with one tension band on the shuttle. Complete 30 repetitions as illustrated below. The goal is to create a burn in the quadriceps muscle. If you do not feel this, increase the number of repetitions or number of bands until you achieve this. Repeat the shuttle exercises every 3-4 hours.

1. Extend leg 2. Bend leg

- * Ice for 20-30 minutes after completing the exercises.
- * Goal is to maximize the bands by the time of the first post-operative visit.

WHAT TO EXPECT DURING THE FIRST WEEK

- * Expect swelling and discomfort in the knees. This will be minimized by elevating the legs and icing.
- * You may also notice bleeding and saturation of the dressing. You can change or reinforce the dressing as needed but leave the steri-strips (tan or white strips applied directly to the skin) in place.
- * It is very common to notice bruising at the knee – this often extends to the ankle.

CALL THE OFFICE IF YOU DEVELOP ANY OF THE FOLLOWING:

- * increased pain in your calf muscle
- * shortness of breath
- * Temperature higher than 101 °F
- * Purulent discharge (pus) from the incision.

Any other questions, call Dr. O'Shea: 503-320-7283 (cell phone)

Instructions given by: _____

Pt released to: _____ **Date:** _____