

**Facey Medical Group**  
**Orthopaedic Surgery & Sports Medicine**  
Charles R. Young, MD  
(661) 424-8830

## **ACL Reconstruction**

*The following is intended as an overview of the surgical treatment & post-operative expectations of your injury. Many of the questions that patients routinely have are addressed here, but if you have further questions or do not understand the content, please contact us.*

### **Postoperative Instructions**

- Pain Medication** – You will be given a prescription for pain medication following surgery. Take these as directed for as long as you require them, usually 1-2 weeks. Most patients tolerate these medicines well, but they can cause drowsiness, nausea, vomiting, and, rarely, allergic reactions. When the initial pain subsides, you can substitute them with acetaminophen (Tylenol). Do not take these medicines with alcohol or with other prescription pain medicines. These medications rarely eliminate all pain, but if they are not adequately controlling your pain, or if you are having significant side effects, you should alert your physician.
- Anticoagulation** – Despite the low risk for lower extremity blood clot formation, extra precautions are advised. This includes use of the compression stockings, avoiding prolonged immobilization and aspirin. **Take one baby aspirin (81mg) daily with food for 30 days following surgery.** Do not take aspirin if you are allergic to aspirin, already taking other anticoagulation (warfarin, clopidogrel, enoxaparin, etc. or are already on a different aspirin dose) or have a history of ulcers or easy bleeding.
- Dressing Care** – The initial dressings may be carefully removed 3 days after surgery. Do not pull at the underlying sutures or adhesive bandages. Keep the area clean & dry and cover it with a fresh gauze or other bandage. Continue to use the compression stockings as long as possible, but at least until you are walking normally. Ice packs should be used over the dressings every hour for 15 minutes until the initial inflammation subsides. They can then be used 3 times daily for 15 minutes or as needed, such as after physical therapy.
- Bathing** – Showering is acceptable after the first bandage removal. Limit your shower to short duration and avoid directing water at the incisions. A plastic covering may be used to limit water contact with the surgical area. Avoid using any soap, alcohol or peroxide and do not submerge the incision. Once finished, pat the area dry and cover with a fresh gauze or other bandage.
- Weight bearing** – Unless otherwise directed, you may bear full weight on the operative leg immediately. If you have received a regional block, weight bearing should be restricted until you regain control of the leg. Crutches are provided for assistance with balance and can be set aside when you feel safe to do so. When not walking, you should elevate the leg to minimize pain & swelling.
- Return to Work/School** – Returning to work or school is highly individualized based on your demands at work/school, transportation needs & individual course of recovery. Most patients should plan on a period of 2-4 weeks of recovery if possible. Those with lower physically demanding jobs, including no lifting, pushing, pulling, twisting or prolonged standing, may be able to return sooner. Light duty arrangements may be necessary. When you do return to work, you should be off of prescription pain medications, have good leg control and be able to take necessary breaks to elevate the leg. If returning to school, make sure to have a doctor's note for temporary physical education exemption.
- Driving** – Safety is paramount with respect to your return to driving. You should be off of all prescription pain medications and have enough control of your leg to react safely to the normal hazards of the road. This will be true for most patients within 2-4 weeks, but is individualized and may take longer for right-sided knee surgery.

### **Post-operative Visits**

Please call the office to confirm your initial post-operative visit date & time. If you would like to review your intra-operative pictures, please bring them with you to the appointment.

Your first post-operative visit is scheduled for:

---

## Warning Signs

Like any surgery, ACL reconstruction is an invasive procedure. As such, there are inherent risks of which you should be aware. Complications are not common, but they can occur, and if they do, every effort will be made to correct the situation. Below are some of the problems that may be encountered. If you have any concerns, please contact the surgical team immediately.

*Bleeding* – ACL reconstruction is performed under tourniquet control, therefore the risk of intraoperative bleeding is quite low. Bleeding can occur after surgery, however, from the incision sites or into the joint, leading to a hemarthrosis (blood accumulation in the joint) or hematoma (blood accumulation in the soft tissues). Often this can be managed without further invasive procedures, but may cause pain, anemia (low blood count) or interfere with normal motion of the knee after surgery. **Alert your doctor to excessive pain, swelling or bleeding from the incision sites, so that appropriate measures can be taken.**

*Infection* – The risk of infection following ACL reconstruction is extremely low due to meticulous sterile technique and the continuous irrigation of the joint throughout the procedure. In addition, you will receive a dose of antibiotics before your surgery to lower this risk. **If you experience excessive pain, swelling, redness, fever or drainage from the incisions, tell your doctor immediately so that appropriate measures can be taken.**

*Pain* – Some amount of postoperative pain is expected following surgery. This should be controllable with elevation, ice compresses and pain medications. If it is not, contact your doctor to assess the situation.

*Deep Venous Thrombosis (DVT)* – Thrombophlebitis is an inflammation of the deep veins of the legs and pelvis, which can be associated with blood clot formation. These clots can break away and lead to pulmonary, cardiac and other complications. **Alert your doctor to excessive calf pain or swelling, shortness of breath or chest pains. Blood clots may require treatment with blood thinning medications.**

## Special Precautions

---

---

---

---

# Facey Medical Group Orthopaedic Surgery

Charles R. Young, MD  
(661) 424-8830

## ACL Reconstruction

Most therapists are well-aware of standard ACL reconstruction rehabilitation protocols. The following is for your information in order to know what to reasonably expect following surgery. The exact details and exercises may vary based upon your progression and the plan as discussed with you, your physician & your therapist. You may, however, share this outline with your therapist to facilitate communication. Any questions that you or your therapist have, should be directed to the surgical team.

The following program is based upon the MOON (Multicenter Orthopaedics Outcomes Network) Group criteria.

## Precautions

*Avoid knee extension exercises against resistance until cleared to do so*  
*Avoid sharp turning, cutting or pivoting maneuvers until cleared to do so*  
*Additional Precautions/Directions:*

---

---

### Weeks 1-2

#### Goals

*Full knee range of motion (0-120 degrees)*

Exercises (low load, long duration):

Heel prop stretching

Wall slides

Seated assisted knee flexion

Prone hangs

Heel slides

Stationary bicycle

*Patellar mobilization*

Exercises:

Manual medial/lateral patellar mobilization stretching

Manual superior/inferior patellar mobilization stretching

*Quadriceps/Hamstring Control*

Exercises:

Straight leg raise

Quadricep sets (isometric, including co-contraction)

Hamstring sets (isometric, including co-contraction)

Hamstring curls

Double-leg quarter squats

Side-lying hip adduction/abduction

(avoid abduction stretching if concomitant MCL injury)

Prone hip extension

Ankle pumps with theraband

Heel raises/calf press without resistance

*Minimize pain & swelling*

Leg elevation

Light compression wrap

Cryotherapy (Ice-flow machine)

1<sup>st</sup> 24 hours or until acute inflammation is controlled: Every hour for 15 minutes

After acute inflammation is controlled: Three times daily for 15 minutes

*Normal gait pattern*

Crutches

Weightbearing as tolerated (unless otherwise specified)

Discontinue crutches when stable & safe gait pattern achieved and able to ascend/descend stairs safely

Brace

Discontinue after nerve block expires and adequate early control of leg returns

### **Weeks 3-6**

#### **Goals**

*Full knee range of motion & patellar mobilization*

Exercises as above

*Improve muscle strength*

Exercises as above & include:

Mini-squats/wall-squats

Step-ups

Knee extension without resistance (90-40 degrees)

Leg press

Standing heel raises – double/progress to single

Seated calf press with resistance

*Neuromuscular retraining*

Exercises:

Single-leg stance

Wobble board

Rocker board

Slide board

Fitter

*Cardiopulmonary exercise*

Exercises:

Stationary bicycle (progress to low-seat)

Elliptical trainer

Stairmaster

*Minimize pain & swelling*

Cryotherapy as needed

Scar massage (after wound check by surgical team)

### **Weeks 7-12**

#### **Goals**

*Strengthening*

Exercises as above & include:

Squats

Knee extension without resistance (90-0 degrees)

Lunges

Shuttle (Press without jump)

Sports cord resistance

*Neuromuscular retraining*

Exercises as above & include:

Perturbation training

Varied surfaces

*Cardiopulmonary exercise*

Exercises as above & include:

Straight line running on treadmill or protected surface (NO cutting or pivoting)

### **Weeks 13-20**

#### **Goals**

*Aggressive strengthening*

Exercises as above & include:

Plyometrics

*Agility training*

Shuffling

Carioca

Hopping

Vertical jumps

Running patterns (Figure-of-8, pivot drills, etc.) at 50-75% speed

Sports-specific drills at 50-75% effort

*Neuromuscular retraining*

Exercises as above

*Cardiopulmonary exercise*

Exercises as above

### **Weeks >20**

#### **Goals**

*Aggressive strengthening*

Exercises as above & include:

Knee extension with graduated resistance OK

*Agility training, Neuromuscular retraining & Cardiopulmonary exercise*

Exercises as above

*Sport Specific Activities*

Interval training

Sprinting

Running patterns

Change of direction

Pivot & drive

Kicking

### **Return to Sport/Unrestricted activities**

#### **Goals**

No functional complaints

Confidence when running, cutting & jumping at full speed

85% contralateral values on hop tests (single-leg hop, triple hop, cross-over hop, 6-meter timed hop)

80% contralateral values on isokinetic strength tests (30/60/90 degrees/sec)

*Use ACL-specific brace during return to sport until at least 1 year post-operatively*