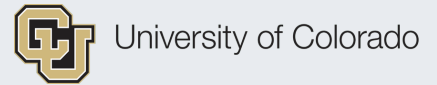


Prehabilitation for ACL Tears

Patient Handout



Background

The anterior cruciate ligament (ACL) is a ligament that attaches the femur (thigh bone) to the tibia (shin bone) to stabilize the knee. In most cases, surgery is required to restore knee stability and function after an ACL tear. The most common complication following ACL surgery is knee stiffness, which can greatly limit a person's ability to perform physical therapy and, in some cases, requires an additional surgery to remove the scar tissue that causes the stiffness.

What is Prehabilitation?

Prehabilitation, or "pre-hab," refers to a structured exercise and rehabilitation program that occurs prior to ACL surgery. The goal is to improve physical and mental readiness for the surgery and post-operative physical therapy. Additionally, the time spent in prehab helps to decrease the swelling and inflammation within the knee. This approach helps to maintain or improve muscle strength, flexibility, and overall knee function, which can significantly improve recovery after surgery.

GOALS OF PREHABILITATION

THE MAJOR GOALS PRIOR TO
HAVING ACL SURGERY INCLUDE:

- ❖ Being able to fully straighten your knee and bend to at least 120°
- ❖ Walk normally
- ❖ Minimize pain
- ❖ Reduce swelling
- ❖ Develop good quadriceps muscle strength & control

Benefits of Prehabilitation

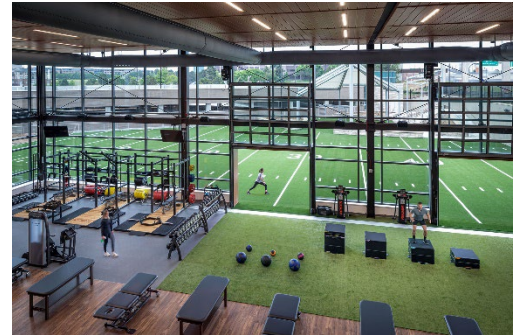
- 1. Improved Physical Function:** Better preoperative physical function is associated with improved postoperative outcomes. Studies have shown that patients who participate in prehab have enhanced muscle strength and joint stability, both of which are critical for recovery.
- 2. Reduced Postoperative Complications:** By preparing the body for the stresses of surgery, patients may experience less pain and improved mobility following surgery. Improved knee range of motion, increased strength, and decreased swelling and inflammation preoperatively are all associated with decreased risk of knee stiffness following ACL surgery.
- 3. Psychological Readiness:** Prehab can help alleviate anxiety and improve adherence to postoperative rehabilitation protocols.
- 4. Faster Return to Activity, Higher Return to Sport:** Patients who engage in prehab are often able to return to their pre-injury level of activity sooner and able to return to sport at a higher rate than those who do not perform prehabilitation.



References

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3. Shelbourne KD, Wilckens JH, Mollabashy A, DeCarlo M. Arthrofibrosis in acute anterior cruciate ligament reconstruction. The effect of timing of reconstruction and rehabilitation. *Am J Sports Med.* 1991 Jul-Aug;19(4):332-6. doi: 10.1177/036354659101900402. PMID: 1897645.

Components of an Effective Prehabilitation Program



Flexibility Training: Stretching exercises to enhance range of motion and reduce knee stiffness

Strength Training: Focus on strengthening quadriceps and hamstrings, which are essential for knee stability

Balance and Proprioception: Improve coordination and prevent future injury

Education and Psychological Support: Provide information about surgical process and recovery

Your physical therapist will be able to assist you in developing an appropriate prehabilitation program to meet these preoperative goals. For further information and details of mobility and strengthening exercises, please visit

<https://acltear.info/anterior-cruciate-ligament-rehabilitation/acl-prehab/>