



ACL Reconstruction

The
**Bone &
Joint**
Center

On your road to recovery...

Rehabilitation is essential to help you return to an active life and reach your personal goals. This booklet provides goals, activities and milestones to guide your rehabilitation and chart your progress each week.

If you have any questions, please call our office at (616) 738-4420.

Thank you for choosing The Bone & Joint Center!

In Good Health,



*Carl H. Wierks, MD
Orthopedic Surgeon*

Before Anterior Cruciate Ligament (ACL) Reconstruction

PRE-HABILITATION

What to Expect Before Surgery

Prior to ACL reconstruction, therapy will focus on decreasing swelling, improving knee range of motion and obtaining muscle control of the quadriceps. Once these goals have been accomplished, you are set up to have the best possible result of your surgery.

Your goals during this phase:

- Eliminate knee swelling
- Improve knee range of motion
- Improve thigh muscle tone

Example rehabilitation activities:

- Passive and active-assist range of motion exercises of the knee
- Calf pumps and straight leg raises
- Edema control modalities by the therapist

Milestones to work towards:

- Eliminate knee swelling
- Obtain knee motion from 0-120 degrees
- Actively fire the quadriceps muscle

After ACL Reconstruction

PHASE ONE: PROTECTION

What to Expect During Weeks 1-2

During the first phase of rehabilitation, ACL reconstruction focuses on protection of the graft while regaining range of motion, and maintaining activation of the quadriceps (thigh) muscle.

Your goals during this phase:

- Protect healing tissue from movement and weight
- Decrease swelling and pain
- Improve your knee's ability to flex and extend
- Regain quadriceps muscle strength

Example rehabilitation activities:

- Straight leg raises (flexion, extension, abduction, adduction)
- Knee flexion goal (0-90 degrees)

When to be careful or concerned:

- The brace should be worn when up and active to protect the knee from the weak quadriceps muscle "giving away".
- Any fever greater than 101, wound drainage after the first 5-7 days, or any increase in pain.

Milestones to work towards:

- Motion 0-90
- Discontinuation of crutches
- Active "firing" of the quadriceps muscle

	Week 1	Week 2
Date		
Pain (1-10)		
Swelling* (1-5)		
ROM (0°-135°)		
Weight Bearing (0-100%)		

*Key:

1 = None | 2 = Mild | 3 = Moderate | 4 = Severe | 5 = Extreme

Milestones: _____

After ACL Reconstruction

PHASE TWO: TRANSITION

What to Expect During Weeks 3-5

During the second phase of rehabilitation, ACL reconstruction focuses on increasing range of motion, and activation of the quadriceps (thigh) muscle.

Your goals during this phase:

- Maintain full extension and increase flexion
- Pain controlled without narcotics
- Begin exercise bike
- Quadriceps muscle strength throughout motion

Example rehabilitation activities:

- Stationary bike
- Patella mobilization
- Aqua program (optional but encouraged)

Milestones to work towards:

- Motion 0-120 degrees
- The brace will be weaned as strength in the quad returns
- Increase endurance

	Week 3	Week 4	Week 5
Date			
Pain (1-10)			
Swelling* (1-5)			
ROM (0°-135°)			
Weight Bearing (0-100%)			

*Key:

1 = None | 2 = Mild | 3 = Moderate | 4 = Severe | 5 = Extreme

Milestones: _____

After ACL Reconstruction

PHASE THREE: FUNCTIONAL ACTIVITY

What to Expect During Weeks 6-9

During the third phase of rehabilitation, ACL reconstruction focuses on retraining the knee muscle and regaining function.

Your goals during this phase:

- Encourage muscle memory
- Start functional exercises
- Build endurance

Example rehabilitation activities:

- Stair, ski machines
- Balance boards
- Resisted exercises, closed kinetic chain, short arc (e.g. short arc squats/wall slides)

Milestones to work towards:

- Motion to full
- Endurance
- Walk 20 minutes without pain
- Obtain your functional brace

	Week 6	Week 7	Week 8	Week 9
Date				
Pain (1-10)				
Swelling* (1-5)				
ROM (0°-135°)				
Weight Bearing (0-100%)				

*Key:

1 = None | 2 = Mild | 3 = Moderate | 4 = Severe | 5 = Extreme

Milestones: _____

After ACL Reconstruction

PHASE FOUR: CONDITIONING

What to Expect During Weeks 10-12

During the fourth phase of rehabilitation, ACL reconstruction focuses on retraining the knee muscle and regaining function.

Your goals during this phase:

- Encourage muscle memory
- Start functional exercises
- Build endurance

Example rehabilitation activities:

- Stair, ski machines
- Balance boards
- Resisted exercises, closed kinetic chain, short arc (e.g. short arc squats/wall slides)

Milestones to work towards:

- Motion to full
- Endurance
- Walk 20 minutes without pain

	Week 10	Week 11	Week 12
Date			
Pain (1-10)			
Swelling* (1-5)			
ROM (0°-135°)			
Weight Bearing (0-100%)			

*Key:

1 = None | 2 = Mild | 3 = Moderate | 4 = Severe | 5 = Extreme

Milestones: _____

After ACL Reconstruction

PHASE FIVE: RUNNING & ACTIVITY

What to Expect During Week 13-16

During the fifth phase of rehabilitation, ACL reconstruction focuses on retraining the knee muscle and regaining function.

Your goals during this phase:

- Encourage muscle memory
- Start functional exercises
- Build endurance

Example rehabilitation activities:

- Stair, ski machines
- Balance boards
- Resisted exercises, closed kinetic chain, short arc (e.g. short arc squats/wall slides)

Milestones to work towards:

- Motion to full
- Endurance
- Walk 20 minutes without pain

	Week 13	Week 14	Week 15	Week 16
Date				
Pain (1-10)				
Swelling* (1-5)				
ROM (0°-135°)				
Weight Bearing (0-100%)				

*Key:

1 = None | 2 = Mild | 3 = Moderate | 4 = Severe | 5 = Extreme

Milestones: _____

After ACL Reconstruction

PHASE SIX: RETURN TO SPORT

What to Expect During Weeks 17+

During the first phase of rehabilitation, ACL reconstruction focuses on protection of the graft while regaining range of motion, and maintaining activation of the quadriceps (thigh) muscle.

Your goals during this phase:

- Encourage muscle memory
- Start functional exercises
- Build endurance

Example rehabilitation activities:

- Stair, ski machines
- Balance boards
- Resisted exercises, closed kinetic chain, short arc (e.g. short arc squats/wall slides)

Milestones to work towards:

- Motion to full
- Endurance
- Walk 20 minutes without pain

	Week 17			
Date				
Pain (1-10)				
Swelling* (1-5)				
ROM (0°-135°)				
Weight Bearing (0-100%)				

*Key:

1 = None | 2 = Mild | 3 = Moderate | 4 = Severe | 5 = Extreme

Milestones: _____



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