Health ONE® Swedish Medical Center

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ARTHROSCOPIC KNEE SURGERY

The physical therapy rehabilitation program following arthroscopic knee surgery will vary in length depending on such factors as:

- ♦ Type of surgical procedure performed
- ♦ Acute vs. chronic condition
- ♦ Pre-surgery status
- ♦ Performance / activity demands

The physical therapy program consists of three phases. It is possible to overlap phases depending on the individual progress of each patient. The goals of Phase I include pain modulation, inflammatory control, restore range of motion (ROM), improved quadriceps strength and attaining full weight bearing normal gait. Phase II rehabilitation consists primarily of advanced progressive strengthening while the focus of Phase III is on functional return to prior levels of activity. Isokinetic strength evaluation may be included in Phase III if prescribed by the physician.

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Phase I
(1-14 Days)

Clinical Goals

- Minimal swelling/inflammation
- Increase ROM
- Normalize gait
- Improve quadriceps control

Testing

- Bilateral ROM

Exercises

- Application of cryocuff at least six to eight times per day. It is also very important to apply the cuff after exercising. The purpose of using the cryocuff is to apply cold and compression to control pain and swelling.
- Use of tubi-grip stocking the first week or so following surgery to help control the swelling.
- Attempt to keep the leg elevated as much as possible the first few days following surgery.
- Begin partial to full weight bearing with crutches. Crutches may be discontinued when full weight bearing without a limp is attained. In most instances, the patient will be full weight bearing by the end of Phase I. An osteochondral lesion on a weight bearing surface may be one instance where the patient remains non-weight bearing for a prescribed period of time.
- Regaining full extension is the most critical factor in this phase. Early terminal extension has been demonstrated to be the key to a successful result. The patient is encouraged to push extension and regaining full flexion through the following exercises.
    - Towel extensions
    - Prone Hangs
    - Heel Slides
- Patient is encouraged to lock knee out by standingwith weight shifted to surgical leg, so that extension is full and knee is fully locked.
- Perform quadriceps strengthening exercises to facilitate early return to normal strength. Closed and Open kinetic strengthening will be used including:
  - Straight leg raises
  - Knee extensions
  -Calf raises

Clinical Follow-up

- The patient will follow up in 1 to 2 weeks.
- The patient should have full terminal extension and full flexion.
- Normal gait should also be attained.

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Phase II
(2-4 Weeks)

Clinical Goals

- Full extension and flexion
- Normal gait
- No swelling
- Early return to agility and sport specific activities as tolerated

Exercises

- Ice is continued as needed 3 to 4 times a day, and always after exercises.
- If the patient does not have full extension or flexion, range of motion exercises will be continued.
- Because of the delicate nature of extensor mechanism/patello-femoral problems, the advanced strengthening phase will need to be modified .The patient should not experience pain or crepitus when performing these exercises.
  - Unilateral 1/4 knee bends
  - Unilateral step downs
  - Unilateral calf raises
  - Lunges
- Bicycling and stairmaster workouts may be started in this phase. The initial bike workouts will be ten to fifteen minutes duration with minimal resistance, working towards a full 30 minutes with moderate to high resistance. Twenty to thirty second sprints every five minutes during the bike workout are performed towards the end of Phase II.
- Weightroom activities may be initiated once the patient regains full range of motion and has sufficient leg control including:
  - Unilateral leg press
  - Unilateral knee extensions
  - Calf raises
  - Hamstring curls
- Freestyle and flutterkick swimming can be performed during Phase II. Walking and eventually running in chest deep water can be done toward the end of this phase. Breaststroke is not encouraged especially with extensor mechanism problems.

Clinical Follow-up

- Return to activities as tolerated
- Regaining of normal quadriceps strength
- Full range of motion

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Phase III
(4+ Weeks)

♦The focus of Phase III rehabilitation is on functional return of the patient to prior activity levels.

♦Strengthening will be continued in those areas where weakness is noted.

♦Implementation of a sport specific functional progression is appropriate at this time.