

Post-operative Hamstring Autograft/Allograft ACL Reconstruction Protocol

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Chennai – 10.

First 7-10 days

- 1) Keep brace on and locked in full extension. May remove brace for exercises.
- 2) Use crutches for touch down weight bearing only.
- 3) Change dressing on second day after surgery and replace with dry dressing. Leave tape/steri-strips on the skin and do not remove unless they fall off on their own.
- 4) Perform calf pumps, straight leg raises, heel slides, and quadriceps sets three times each day (10-20 repetitions each time).
- 5) Use ice pack/cryocuff at least 3 times each day for 15 minutes each time to reduce swelling and pain
- 6) Keep wound/dressings dry. No showers for 7 days and no baths for three weeks
- 7) Pain medication, muscle relaxant, vitamin D/calcium supplementation, and antibiotics will be prescribed. Do not use anti-inflammatory medication like Advil (ibuprofen), Aleve (naproxen) for 6 weeks after surgery.

1 week to 6 weeks

At first clinic visit:

- 1) May unlock brace but may need to wear it for 4 weeks total depending on quadriceps muscle recovery
- 2) Gradually discontinue crutches and fully weight bear by 3 to 4 weeks after surgery.
- 3) Sutures will be removed if necessary but often they are buried under the skin. No baths or pools for 3 weeks after surgery.
- 4) Do not need to wear dressing if brace does not rub against the wound.
- 5) Steri-strips will fall off on their own. If they do not fall off, pull them off gradually by two weeks after surgery.

PT goals (Range of motion):

- 1) Full symmetric extension by 2 weeks. Notify my office if not achieved.
- 2) 90-100 degrees of flexion by 3-4 weeks and full flexion by 6-8 weeks.
- 4) Swelling control.
- 5) Hamstring activation closed or open chain.

Exercises:

- 1) Quadriceps sets
- 2) Straight leg raises
- 3) Patellar mobilization
- 4) Prone knee flexion/extension
- 5) Heel slides
- 6) Sitting knee flexion
- 7) Hamstring activation closed or open chain depending on comfort
- 8) When range of motion allow, may be on a stationary bike with little to no resistance

6 weeks to 12 weeks

6 week clinic visit:

- 1) Knee should be fully extended.
- 2) Brace should have been off for 2 weeks.
- 3) Should be able to walk with little or no limp.
- 4) Swelling should be absent.

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PT goals (Improve ROM, advance strengthening with closed and open chain exercises):

- 1) Obtain full knee flexion by 6 weeks
- 2) Quadriceps strengthening
- 3) Hamstring strengthening
- 4) Calf strengthening

Exercises:

- 1) Wall slides and mini-squats to 45 degrees (closed chain 0-45)
- 2) Open and closed chain quadriceps exercises with increasing weights
- 3) Open and closed chain hamstring exercises with increasing weights
- 4) Toes raises, step ups

At 6 weeks:

- 1) Continue stationary bike with increasing resistance. May use treadmill with an incline.
- 2) Swimming (free style stroke and backstroke only; avoid heavy kicking strokes)

3 to 7 months

PT goals:

- 1) Continue all previous exercises to progress to full strength of quadriceps and hamstrings. May participate in any weightlifting activity that is not painful.

Exercises:

- 1) May start elliptical trainer at 3 months
- 2) Start jogging at 4 months.
- 3) Squats, leg presses and progress to full weight by 6-7 months. All weight training should be slow, controlled. No ballistic motion. No cutting maneuvers.

7-9 months

Goals:

1) Sport specific exercises but no competition yet

Exercises:

1) Begin with sport-specific exercises and cutting maneuvers and progress to playing over 1-6 weeks
9 months

Goals:

- 1) Return to sport if full range of motion, strength is 90% of other leg.
- 2) Use brace for first 6-8 weeks if needed.

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Additional instructions:

If right leg is operative leg, may not drive automatic transmission vehicle for 2-4 weeks.

If left leg is operative leg, may drive automatic transmission vehicle after have stopped using narcotic pain medication.

May return to sedentary desk work in one week.

May return to work requiring standing gradually over 3-4 weeks.

May return to heavy labor in 6-8 months.

Duration and frequency of PT:

For week 1-7 (12 visits): supervised 2x/week. Perform exercises on your own 5-7 days/week

For week 7-13 (12 visits): supervised 1x/week. Perform exercises on your own 3-5 days/week

For weeks 12-24 (0-3 visits): supervised 1x/month. Perform exercises on your own 3-5 days/week