INFORMATION AND EXERCISES

ACL Tear: Non-operative Management

For a torn anterior cruciate ligament (ACL), when an operation is not planned

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Most complete ACL tears need an operation, an arthroscopic (keyhole) ACL reconstruction, for the best knee function. This programme is only for people who have decided, for any reason, not to have an operation, or who cannot have one for medical reasons. This sheet explains how to make the knee as strong and steady as possible without an operation, and sets out the exercises step by step.

BRACE, FOR COMFORT	HEAVIER STRENGTH WORK	TWISTING AND TURNING	KEEP GOING
First 4 weeks	2 to 3 times a week	Avoid for now	At least 3 months

Understanding an ACL tear

The anterior cruciate ligament (ACL) is a strong band inside the knee that joins the thigh bone to the shin bone. It stops the shin bone sliding forwards, and steadies the knee when you twist and turn. It usually tears in a sports injury, when the knee twists or you land awkwardly, often with a pop and swelling within a few hours.

Without a working ACL, the knee can feel wobbly, or suddenly give way, especially when you twist, turn or change direction. A torn ACL does not usually heal back to normal on its own, but strong, well-controlled muscles around the knee can help to hold it steady.

Without an operation, the aim is to make the muscles around the knee strong and well controlled, so that the knee is as steady as possible for everyday life. Trying exercises first does not rule out an operation later: if the knee keeps giving way, or you change your mind, an operation is still possible.

Everyday tips

- Keep active, but for now avoid twisting and turning on the knee, sudden changes of direction, and jumping. Turn by taking small steps, rather than pivoting on the injured leg.
- Walking, cycling and swimming (front crawl) keep you fit without twisting the knee.
- Take care on uneven ground, slopes and stairs until the knee feels steady.
- Keep to a healthy weight: extra weight puts more load on the knee.

Easing pain and swelling

- In the first days after the injury, rest the knee from anything that makes it worse, but keep it moving gently. Crutches help for a few days if you are limping.

- For the first 4 weeks after the injury, a knee brace is worn for comfort. It lets the knee bend and straighten freely, so keep doing the exercises. After 4 weeks from the injury, it is no longer needed.
- An ice pack wrapped in a thin towel, for up to 20 minutes at a time, several times a day, eases the pain.
- Raise the leg when you rest. A stretchy bandage around the knee can help to control the swelling.
- Painkillers, taken as prescribed by Dr Malik, make it easier to keep moving and to do the exercises.

> **If the swelling does not settle, or you are worried about your knee, contact the clinic on +91 99197 03477.**

Contact the clinic if

- Your knee gives way during everyday activities or the exercises. Repeated giving way can damage the knee's cartilage cushions (the menisci) and the joint surface, so do not put up with it.
- The knee keeps swelling up after the exercises, or catches or clicks painfully: these can be signs of a torn meniscus.
- You would like to go back to a sport with a lot of twisting, turning or jumping, or you change your mind and would like to talk about an operation.

CONTACT THE CLINIC URGENTLY IF

- Your knee locks or gets stuck, and you cannot straighten it.
- Your knee gives way and swells up again, or the pain suddenly gets much worse.
- You have pain or swelling in your calf.

Clinic: +91 99197 03477. If you are short of breath or have chest pain, go to the nearest emergency department straight away.

How to do the programme

- Warm up first with 5 to 10 minutes of brisk walking or an exercise bike.
- Do Part 1 two or three times a day, and Part 2 once a day. Do Part 3 two or three times a week, with a rest day in between: the muscles get stronger on the rest days.
- In Part 3, the last few repetitions of each set should be hard work. When you can do 2 more than the target in the last set, add a little more weight next time.
- Keep going for at least 3 months. After that, keep up strength and balance exercises at least twice a week, to keep the knee strong and steady for good.
- Keep a diary of the exercises, the weights, and how the knee feels.

BEFORE YOU BEGIN

- **This programme is only for people who have decided not to have an operation, or who cannot have one. Most complete ACL tears need an operation for the best knee function.** Trying exercises first does not rule out an operation later.
- Start only when Dr Malik or your physiotherapist has told you to. A physiotherapist experienced with knee injuries should guide the programme, and check your progress every week or two.
- Move on to each part when you reach its goals, not by the calendar.
- Some aching or discomfort during the exercises, and for up to 30 minutes afterwards, is normal. If the knee is more swollen or painful the next morning, do less next time, then build up again gradually.
- While you do the programme, avoid sports and activities with twisting, turning or jumping, unless your physiotherapist includes them.
- Follow these exercises as they are written unless Dr Malik tells you otherwise.
- This sheet does not replace individual advice. If it differs from what you were told in clinic, follow the advice you were given there.

Part 1: Calming the knee

Start these as soon as the knee is comfortable. Move on to Part 2 when the swelling has settled, the knee straightens fully, and you can lift your leg straight without the knee sagging.

01 Tightening the thigh muscle

Waking up the muscle at the front of the thigh, which straightens the knee and holds it steady.

1. Sit with your legs up on the bed or sofa, with a rolled-up towel or a small pillow under your injured knee.
2. Pull your foot up towards you, and press the back of the knee down into the towel, so that the knee straightens.
3. Keeping the knee on the towel, lift your heel about a centimetre off the bed. Hold, then relax.

HOLD	REPETITIONS	HOW OFTEN
10 to 15 seconds	10 to 15	2 to 3 times a day

02 Lifting the straight leg

Strengthening the thigh muscle, so that the knee holds steady when you walk.

1. Lie on your back, or sit leaning back on your elbows, with your other knee bent and that foot flat on the bed.
2. Tighten the thigh muscle of your injured leg, so that the knee is straight, and pull your foot up towards you.
3. Keeping the knee straight, lift the leg until it is level with your other knee. Hold, then lower it slowly.
4. If the knee bends as you lift, keep practising exercise 01 for a few more days.

HOLD	REPETITIONS	HOW OFTEN
5 seconds	10	2 to 3 times a day

03 Bending the knee, sitting

Getting the knee bending fully again, with your other leg helping.

1. Sit on a chair with both feet on the floor.
2. Slide the foot of your injured leg back under the chair, bending the knee as far as you can.
3. Cross your other leg in front of it at the ankle, and use it to push your injured foot further back. Hold, then relax.

HOLD	REPETITIONS	HOW OFTEN
5 to 10 seconds	10 to 15	2 to 3 times a day

04 Straightening the knee

Getting the knee fully straight, which matters most in the early weeks.

1. Sit with your injured leg out in front of you, the heel resting on a rolled-up towel or a cushion, so that the back of the knee is not supported. You can also rest your heel on a stool.
2. Place your hand just above the kneecap, and press gently to push the knee straight.
3. Hold, then relax.

HOLD	REPETITIONS	HOW OFTEN
20 seconds	4	2 to 3 times a day

Part 2: Building strength and balance

These build up the muscles that hold the knee steady: start with no weight. Move on to Part 3 when they are all easy, and you can stand on the injured leg for 30 seconds without holding on.

05 Mini squats

Strengthening the thigh and hip muscles, with the knee bending only a little.

1. Stand with your back against a wall, your feet hip-width apart and about a foot's length in front of you.
2. Slide down the wall a short way, bending your knees only a little: well short of a right angle.
3. Keep your knees in line with your toes. Hold, then slide back up.

HOLD	REPETITIONS	HOW OFTEN
5 seconds	3 sets of 15	Once a day

06 Step-ups

Strengthening the leg for stairs and everyday tasks.

1. Stand facing the bottom step of the stairs, holding the rail.
2. Step up with your injured leg, then bring your other foot up beside it. Keep the knee in line with your toes.
3. Step back down with your other leg first, lowering yourself slowly on your injured leg, then bring the injured foot down.
4. Start with a low step, and use a higher one as it gets easier.

REPETITIONS	HOW OFTEN
3 sets of 15	Once a day

07 Bridging

Strengthening the buttocks and the back of the thighs.

1. Lie on your back with both knees bent and your feet flat on the bed or the floor.
2. Squeeze your buttocks and lift your bottom up, until your body is in a straight line from your shoulders to your knees.
3. Hold, then lower slowly. When this is easy, do it on your injured leg only, with the other leg held straight.

HOLD	REPETITIONS	HOW OFTEN
5 seconds	3 sets of 10	Once a day

08 Bending the knee, standing

Strengthening the muscles at the back of the thigh, which help to hold the knee steady.

1. Stand holding on to a kitchen worktop or the back of a sturdy chair.
2. Bend your injured knee, bringing your heel up towards your bottom, as far as is comfortable.
3. Lower it slowly. When this is easy, add an ankle weight, or a light bag over your ankle.

REPETITIONS	HOW OFTEN
3 sets of 15	Once a day

09 Heel raises

Strengthening the calf, which works with the thigh to steady the knee.

1. Stand holding on to a kitchen worktop or the back of a sturdy chair.
2. Push up onto your toes, hold, then lower slowly.
3. When this is easy, do it standing on your injured leg only.

HOLD	REPETITIONS	HOW OFTEN
2 seconds	3 sets of 15	Once a day

10 Standing on one leg

Getting back the balance and control of the knee.

1. Stand on your injured leg, knee slightly bent, lightly holding on to a kitchen worktop.
2. Keep your balance for up to 30 seconds.
3. As it gets easier, let go; then try it with your eyes closed, and later standing on a cushion.

HOLD	REPETITIONS	HOW OFTEN
Up to 30 seconds	5	Once a day

Part 3: Getting strong

Heavier work, two or three times a week; keep doing 08, 09 and 10 on the other days. Your physiotherapist may add balance training on a moving board, which helps to stop the knee giving way.

11 Squatting to a chair

Building strength in the thigh and hip muscles, with more load.

1. Stand in front of a chair, holding a weight to your chest, such as a bag of water bottles.
2. Lower yourself slowly, counting to 3, until you just touch the chair, without sitting down.
3. Then stand up briskly. Keep your knees in line with your toes throughout.

REPETITIONS	REST	HOW OFTEN
3 sets of 8	1 to 2 minutes between sets	2 to 3 times a week

12 Single-leg squat

Building strength and control in the injured leg on its own.

1. Stand on your injured leg in front of a mirror, lightly holding on to a worktop.
2. Bend the knee slowly, as if to sit, about a quarter of the way down, keeping the knee in line with your toes: do not let it fall inwards.
3. Straighten up again with control.
4. When this is easy, go a little lower, let go of the worktop, or do it standing on a cushion.

REPETITIONS	REST	HOW OFTEN
3 sets of 8	1 to 2 minutes between sets	2 to 3 times a week

Part 4: Running and jumping

Only when your physiotherapist agrees: usually when the knee no longer swells after Part 3, and the injured leg is nearly as strong as the other. Start with jogging in a straight line on flat ground, then add the exercise below. Changes of direction come last, and only if your sport needs them.

13 Hopping and landing

Teaching the knee to land, and to change speed, safely, before running and sport.

1. Start with small jumps on both feet, landing softly on the balls of your feet, with your knees bent and in line with your toes.
2. When this is easy, hop forwards on your injured leg and land softly, holding the landing still for 2 seconds.
3. Then hop from side to side over a line on the floor, on the injured leg, landing softly each time.
4. Stop, and tell your physiotherapist, if the knee swells afterwards or feels unsteady.

REPETITIONS	HOW OFTEN	START
2 to 3 sets of 10	2 to 3 times a week	When your physiotherapist agrees

Getting back to sport and work

Sports with a lot of twisting, turning and jumping, such as football, basketball, badminton and kabaddi, put the most strain on a knee without an ACL, and make it more likely to give way. Without an operation, a full return to these sports may not be possible. Your return to sport is built up gradually, and planned separately for each person, depending on the sport and what it demands of your knee.

Work: most people can keep working, with lighter duties at first if the job is physical. Heavy or twisting work is built up gradually, and planned separately for each person, depending on your work and what it demands of your knee.

What to expect

Building strength and control takes months, not weeks: usually at least 3 months. The aim is a knee that is strong and steady for your everyday life.

The knee may not feel quite the same as before the injury. An ACL injury also makes arthritis in the knee more likely in later life, whether or not the ligament is reconstructed: staying active, keeping the muscles strong and keeping to a healthy weight all help to protect the knee.

An operation: ACL reconstruction

An operation to reconstruct the ACL remains the best treatment for most complete tears. It is advised if the knee keeps giving way despite the exercises, if a torn meniscus needs repairing, or if you want to go back to a sport with a lot of twisting and turning. The torn ligament is replaced with a new one, usually a piece of tendon from your own leg.

Trying exercises first does not rule out an operation later: if the knee keeps giving way, or you change your mind, you can still have one. Do not put up with repeated giving way, as it can damage the meniscus and the joint surface.

Dr Malik will discuss whether an operation is right for you. If you have one, his sheet ‘ACL Reconstruction or Repair’ explains the recovery.

Published October 2026 · This sheet is provided for patients under the care of Dr Aditya Malik. It does not replace individual clinical advice. · Medanta Noida & Medanta Defence Colony · +91 99197 03477 · dradityamalik.com