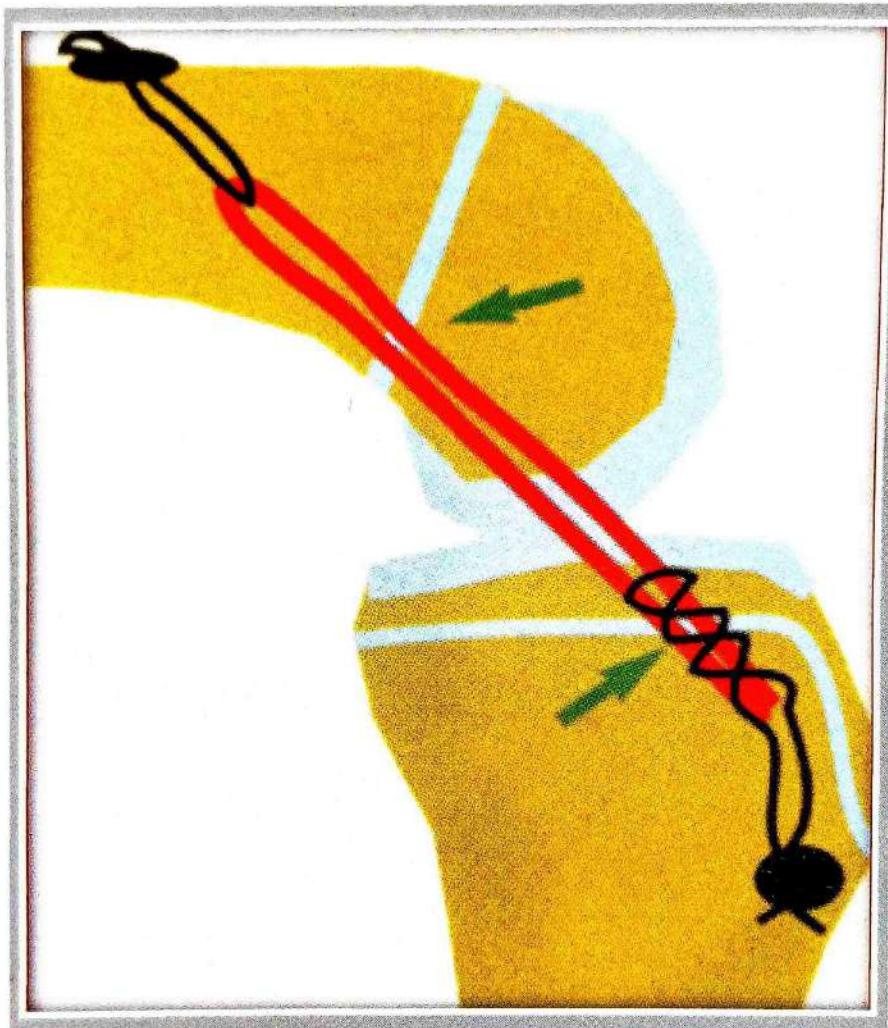


Arthroscopic ACL Reconstruction

Post Operative & Rehab Instructions



These are general post surgery instructions. Most of these are self-explanatory.

If you need further clarifications, please consult our physiotherapists (physio@sportsmed.in) or your local orthopedic surgeon or physiotherapist.

Diet:

- Once the effect of anesthesia wears off & you have no feeling of nausea, start with liquids like tea, coffee or juices.
- Normal diet can follow.
- Avoid alcoholic drinks while you are on medication.



Hospitalization & Medication:

- Usually a 2 night hospital stay suffices
- Intravenous antibiotics & painkillers are administered while in hospital.
- On discharge, oral ones are prescribed.
- If you were previously on any medication such as anti-diabetics, anti-hypertensives or blood thinners, please restart them after consulting your doctor.
- If you develop body rash, mouth ulcers, loose motions, itching or burning in the stomach (acidity), discontinue all medication immediately & contact the doctor.



Bath & Toilet:

- Body sponging & use of a bedpan are recommended for the first 2 days.
- From the 2nd day, you may be mobile enough to go to the bathroom with the help of crutches or a walker.
- Make sure that the washroom is completely dry.
- While using the commode & while bathing, keep the operated leg elevated on a small stool.
- Wrap the operated area in a plastic sheet like cling-wrap and take all precautions not to wet the dressing while bathing.
- After suture removal and once the surgical incisions have healed completely, you can wet the area and even apply soap over it.



Position of the leg:

- Keep the operated leg elevated on pillows to prevent swelling.
- Position the pillows longitudinally so that the entire leg from ankle to knee is well supported.
- Leg elevation is recommended for the first 2 weeks.



Becoming ambulatory:

- From the 2nd post op day, you can start walking with the help of crutches or a walker.
- While getting off the bed, ask someone to support your leg and lower it to the ground. Repeat the same while getting back into bed.



- Hop on the non-operated leg and do not take weight on the operated leg for the first 2 days.
- From the 3rd day onwards, start taking partial weight on the operated leg and gradually increase to full weightbearing by 10 to 15 days.
- If additional procedures like meniscus repair or extra articular ligament reconstruction have been performed along with ACL reconstruction, you may need to be non weightbearing with crutches /walker for a longer period.
- If you notice any redness or swelling on the foot, ankle or shin after walking, reduce your walking and keep the limb elevated on pillows. Apply ice packs over the swollen area 3 to 5 times daily for 3 to 5 minutes.

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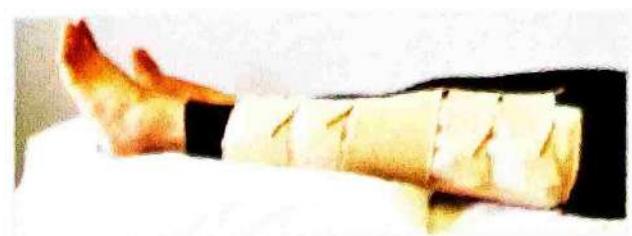
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Use of stairs:

- Please ask the physiotherapist to teach you how to ascend or descend stairs using crutches or a walker.
- Restrict stair climbing for the first 3 weeks

Rigid Knee Brace:

- To protect the operated area and keep your knee straight, a rigid knee brace will be applied post surgery.
- This should be used for the first 3 weeks after surgery.
- Keep this brace on while sleeping & walking.
- Remove the brace when you are awake & while exercising.
- Apply the brace such that the wider portion is towards the thigh and the narrower portion towards the leg. The central strap should be over the knee.
- With this knee brace applied, you may lie on your back or sleep sideways on the operated side.



Dressing & Stitch Removal:

- The dressing that was applied after your surgery will be removed after 10 to 15 days along with the stitches.
- If you experience itching in the operated area or the dressing gets wet, it may be changed earlier.

Returning to work:

- Most patients return to a sitting / sedentary job at the end of 2 weeks, after stitch removal. Some may take a bit longer.
- If your job involves excessive walking or standing, it may take 6 to 8 weeks.
- Use of public transport is not recommended for at least 3 months post surgery.

Hinged knee brace:

- The hinged knee brace is to be used after 3 weeks. We prefer cotton to a neoprene brace.
- This brace allows knee bending but restrains sideways movement.
- Use this only while outdoors and not while sleeping.
- Recommended use is from 3 weeks to 3 months post surgery

Driving a car / 2 wheeler:

- Car driving is possible after 4 to 6 weeks.
- Two wheelers are best avoided for 3 months.

Minor problems after surgery:

- Occasional pain is expected. Take a pain killer if absolutely necessary.
- Mild swelling without pain or warmth is also normal.
- Bruising i.e. Black, blue or red marks on the thigh or calf may be seen. Please apply thrombophobe ointment locally without massage 2-3 times a day.



Minor issues after ACL reconstruction:

(Some temporary, some permanent)

- Clicking or crepitus during movement
- Stiffness after prolonged sitting/standing
- Numbness: over a small patch on the upper outer part of leg

- Day 1 - Ankle pumps - Up & down movement of the foot and ankle helps improve circulation. Repeat a few times, every few hours.



Day 2 - Quadriceps toning - Gentle contraction of thigh muscles. This is achieved by pushing the knee downwards on the pillow or the bed. Hold the contraction for a count of 5 and then relax. Repeat this 5 to 10 times every few hours.



Gentle knee bending- With your hands supporting the knee, bend it 5 degrees on the first day, increasing it by 5 degrees every day to reach 30 degrees at the end of week 1, 60 degrees by the end of week 2 and 90 degrees at the end of week 3.



Moving the leg gently from side to side avoids stiffness in the hips.

Exercising the non-operated leg is also important. Lift it straight up & down, move it sideways, bend and straighten the knee.

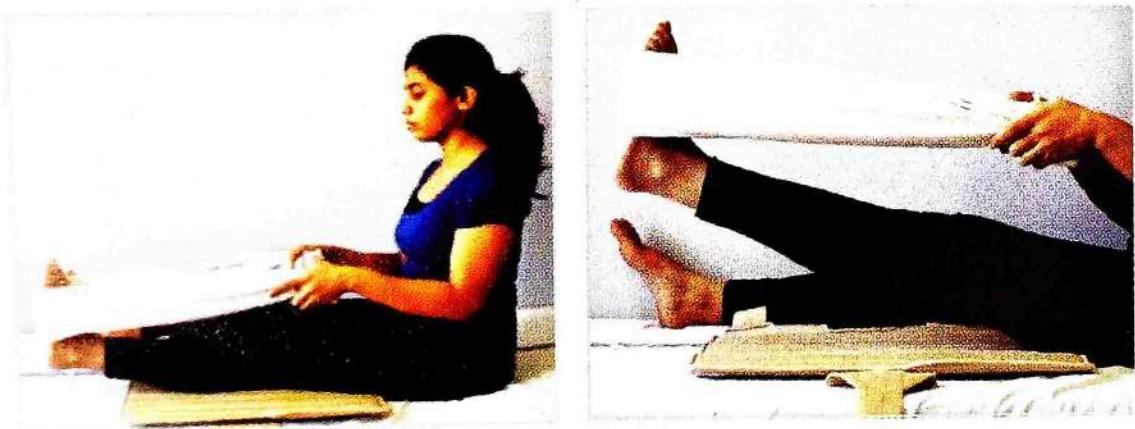
If your muscle contractions are not satisfactory, the physiotherapist may suggest using a muscle stimulator to help in faster recovery.

After stitch removal

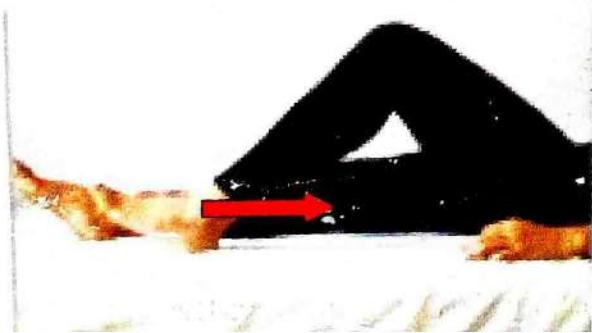
Isometric hamstring exercises – Once your knee bends to 30° , hook the heel against the edge of the bed and then gently pull the heel towards the buttock. Feel the muscles at the back of the thigh tighten. Hold for a count of 5 and then relax. Repeat 10 times and do 3 such sets



Start assisted straight leg lifts. Loop a long towel or dupatta around your foot and gently raise the leg to 30° lower it to 5° and raise again. Repeat 5 times and do this 3 to 4 times during the day. As you get strength and are pain free you can try to lift the leg straight up without external support



Heel slides – Lie on the back, bend the knee to 20° and gently slide the heel along the bed towards the buttock as far as possible and then straighten the knee again. Repeat this about 5 times every couple of hours.



After 3 weeks

Theraband knee bends – Use a theraband or thera tube. Select a light resistance tubing after checking the colour code. Grip the tubing with both your hands. Loop it around your foot and bend the knee and then push gently against the tube till the knee straightens.



Repeat 10 times 3 times in a day. Progressively use higher resistance therabands.



Wall slides – Stand with your back against a wall, place your feet apart at a comfortable distance, slowly bend your knees and hold the position for a count of 5 and come up again. Repeat 5 times every few hours.

Straight leg raise.

- Keep the normal knee bent to 90°.
- Keep the operated knee straight, lift the leg to 30 degrees and slowly lower it to 5.
- Do 10 reps as a set. Repeat 2-3 sets.



Heel raises – Stand holding the edge of a table. Slowly raise both your heels so that you are standing on your toes and then lower again. Repeat 10 times, 3 times thrice daily.

Prone knee bending

- Lie on your tummy, bend the operated leg with help of normal leg and hold the position for a count of 5 and relax. Repeat this 5 times every few hours.



Hip extension

- Lie on your stomach.
- Tighten muscles of the buttock and lift your leg straight up to 30° & lower it to 5°. Repeat 5 times and count this as 1 set. Do 3 sets.

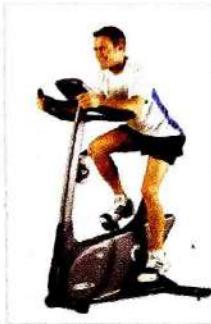


Side lying leg raise

- Lie on one side, bend your lower leg.
- Keep the knee straight, lift the leg to 30° and slowly lower it to 5°.

Gym Exercises

After 6 to 8 weeks one can start using a gym. Avoid treadmill, stepper, crosstrainer and do not use heavy weights.



1. Static cycling

- Static cycling with ZERO resistance.
- Start with 10 minutes initially and gradually increase according to your comfort level



2. Leg press

- Turn your foot 5 degrees inward, press both the legs on the platform.
- Should be done in mid range - 10° to 90° or 100°
- Do not straighten or bend your knees fully.
- Progress to a single leg press - using the operated leg only.
- 10 repetitions x 3 sets. Progressively increase resistance.



3. Reverse Leg Curls

- Do in the mid range - 10° to 90°
- 10 repetitions x 3 sets

4. Leg extension

- Extend your knee up to 45 degrees.
- Do not straighten your knee completely.
- Should be done in mid range.
- Gradually progress to single leg.
- 10 repetitions x 3 sets



5. Calf raises

- Can be done using a calf machine or using free weights
- 10 repetitions x 3 sets

6. Abductors-adductors

- Pushing your knees closer and pushing them out against the resistance.
- Both exercises to be done.
- 10 repetitions x 3 sets



Avoid:

- Treadmill
- Stepper/Elliptical/Cross Trainer
- Twister
- Suryanamaskar
- Lunging

At 6-9 months depending on your recovery and in consultation with a physio or trainer, one can start conditioning exercises for improving

- Strength
- Flexibility
- Balance
- Agility

You may also progress to sports specific training if required.