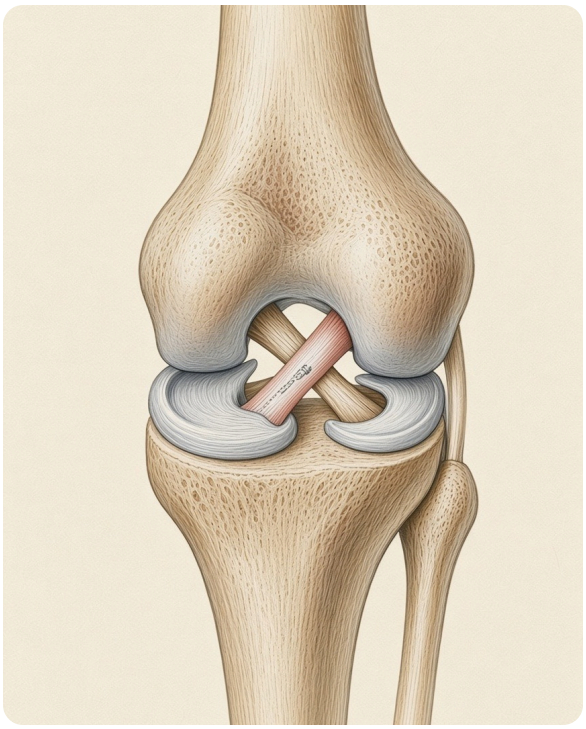
ARMIN PHYSIO



PATIENT GUIDE

ACL Reconstruction Rehab

Your **5-phase** exercise plan, from week 0 to return to sport.

Armin Ghayyur
Physiotherapist · arminphysio.com

Rehab after an ACL reconstruction

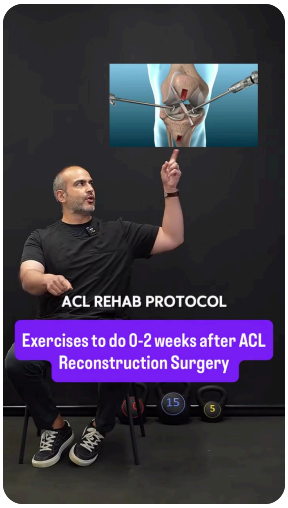
An ACL reconstruction replaces the torn ligament with a graft (often from your hamstring or patellar tendon) fixed into small tunnels in the thigh and shin bones. The graft takes months to get strong, so rehab goes in phases: quad and a straight knee first, then normal walking, then strength and balance, and finally jumping. This is Armin's 5-part ACL protocol, one phase per video.

QUICK CHECK

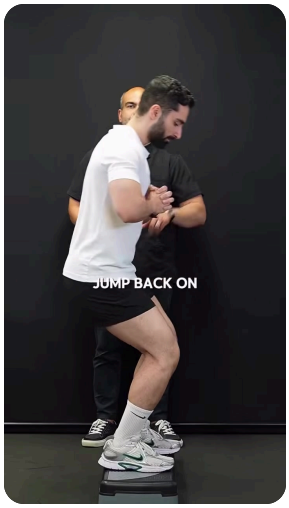
Does this sound like you?

- [ ] You've **had an ACL reconstruction**, or have one booked
- [ ] Your **thigh muscle feels weak** or hard to switch on
- [ ] It's hard to get the knee **fully straight** or to **bend it**
- [ ] You're working on **walking normally** again
- [ ] You want a plan back to **sport**

Find your phase on the next page and check it with your surgeon or physio.



Armin's 5-part ACL rehab protocol



Phase 5: plyometrics and return to sport

BEFORE YOU START

Your recovery, phase by phase

Follow your surgeon's protocol

The weeks in this guide are the general timeline from Armin's 5 videos. Every ACL reconstruction is different (graft type, extra repairs like a meniscus repair, your surgeon's preferences): **your surgeon decides** your weight-bearing, brace, allowed range of motion and when you move to the next phase. If anything here differs from what your surgeon or physio told you, **follow their instructions**.

PHASE	TIMING (ARMIN'S TITLES)	EXERCISES
Phase 1	0–2 weeks	Quad set; band-assisted knee bend; knee extension press; gravity ball knee bend; seated hamstring stretch
Phase 2	3–6 weeks	Weight shifts; wall ball squat; wall calf raise; standing band quad stretch; chair calf stretch
Phase 3	6–9 weeks	Functional squat; step-up; banded terminal knee extension; ball hamstring curl; standing ball hamstring curl
Phase 4	9–12 weeks	Lunge; eccentric step-down; quarter-squat backward walk and side steps; eccentric calf raise; Romanian deadlift
Phase 5	18 weeks +	Step jumps; side-to-side jumps; single-leg hop; single-leg balance toss; ball-assisted hamstring lower

DAILY ROUTINE

The 2-minute, 3-second and stretch-hold times are from Armin's videos; everything else is **suggested**: do the exercises for **your current phase once a day**, about **15–20 minutes**. Armin's videos don't cover weeks 12–18, so keep building on Phase 4 until your surgeon or physio moves you on. Suggested: mild discomfort up to about **4/10** is OK. Don't push through significant pain.

Stop the exercise if you notice

- Sharp pain in the knee, or the knee **locks or gives way**
- Pain above about 4/10, or pain that keeps building as you go
- A **big increase in swelling**, or pain that's worse the next day
- Anything that goes against **your surgeon's instructions**

Stop that exercise and check with your surgeon or physio before carrying on. Some soreness after starting a new phase is common; it should settle by the next day.

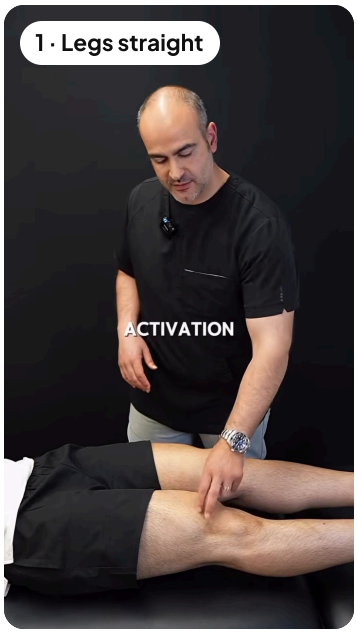
PHASE 1 · 0–2 WEEKS AFTER SURGERY

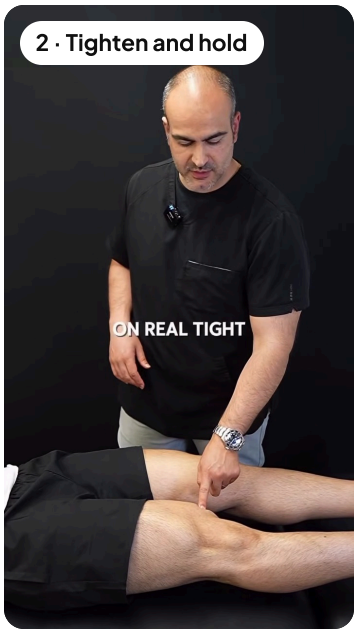
Post ACL reconstruction surgery, Part 1

Goals (from Armin's video description): Understand your weight-bearing guidelines · Understand what range you're allowed to bend and straighten the knee · Maintain your cardiovascular health · Keep your hamstrings and calves flexible · Focus on proper quad activation · Regain full knee extension as much as possible

1 Quad set

Switches your quad muscle back on





1. Lie with your legs straight.
2. **Activate the muscle on real tight.**
3. **Hold it** three, two, one.
4. **Relax** and repeat.

Hold **3 s**, then **2–3 sets of 10**

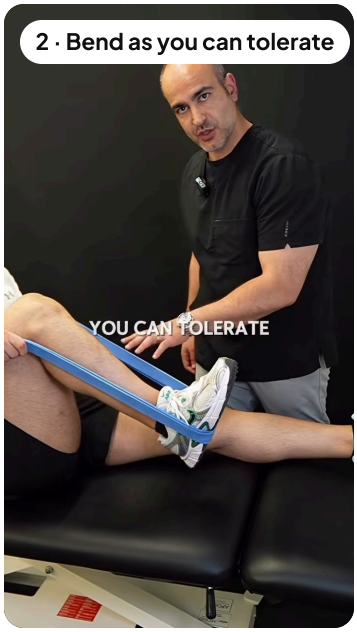
3 s hold from Armin's video; sets and reps suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

2 Band-assisted knee bend

Focuses on your knee flexion





1. **Loop a band or a belt around your foot.**
2. **Bend the knee** as much as you can tolerate.
3. **Go right back out.**
4. **Repeat this for two minutes.**

About 2 minutes

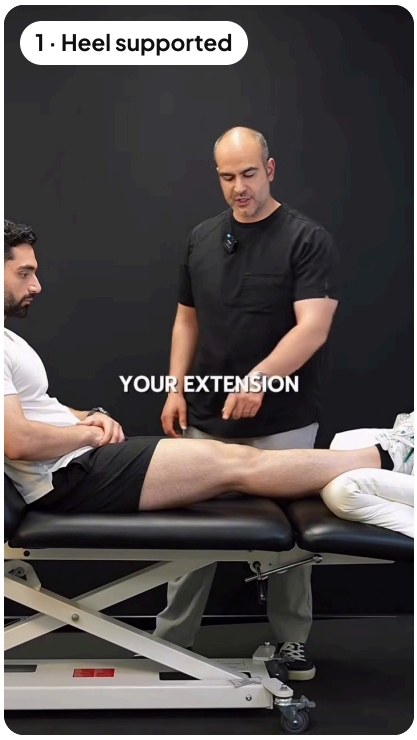
From Armin's video

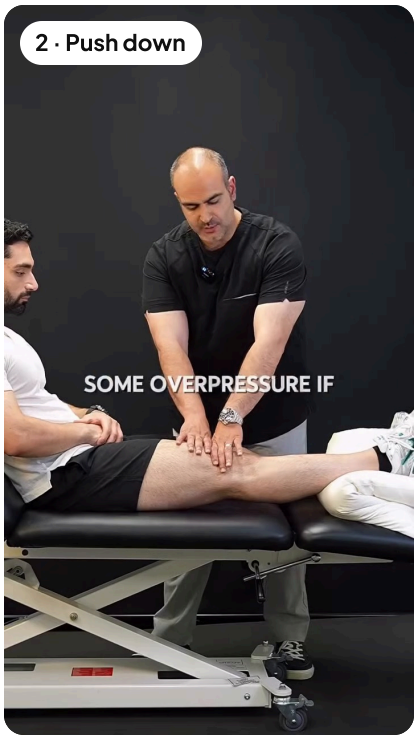
Armin's description: the bend in the video is only a demonstration. Only bend your knee to the range you're allowed, using the belt as needed to help.

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

3 Knee extension press

Focuses on getting the knee straight





1. **Activate your quadricep muscles.**
2. **Push straight down** and relax.
3. You can **add some overpressure** with your hands if you need to.
4. **Hold this for three seconds** and repeat.

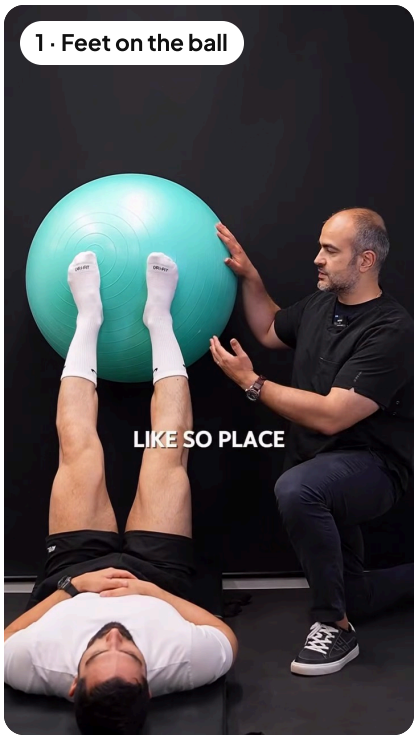
Hold **3 s**, then **2–3 sets of 10**

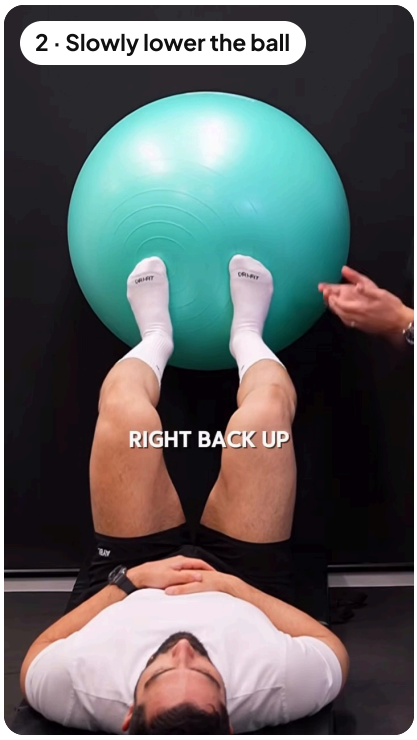
3 s hold from Armin's video; sets and reps suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

4 Gravity ball knee bend

Builds your range of motion against gravity





1. Lie on your back and **place a ball** against the wall, as shown.
2. **Place your feet on it.**
3. **Slowly lower that ball** and go right back up.
4. **Repeat this for about two minutes.**

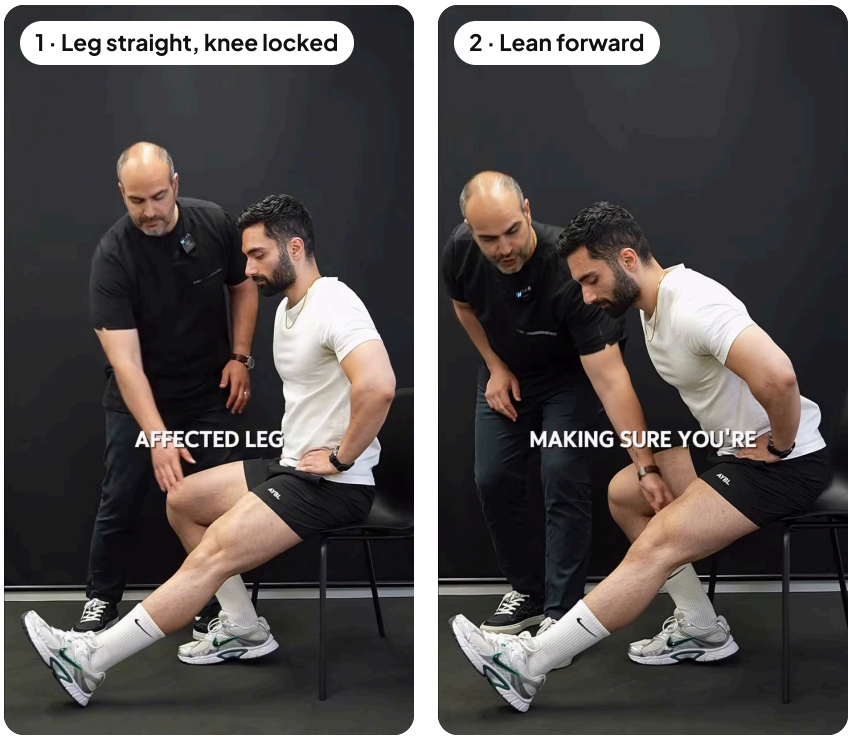
About 2 minutes

From Armin's video

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

5 Seated hamstring stretch

Keeps the back of the thigh flexible



1. Sit and **straighten out the affected leg**.
2. **Make sure that knee is locked.**
3. **Straighten out your back** and **slowly lean forward**.
4. Make sure you're **stretching out your hamstrings**, then go right back.

Hold about 30 seconds, 2–3 times

Suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

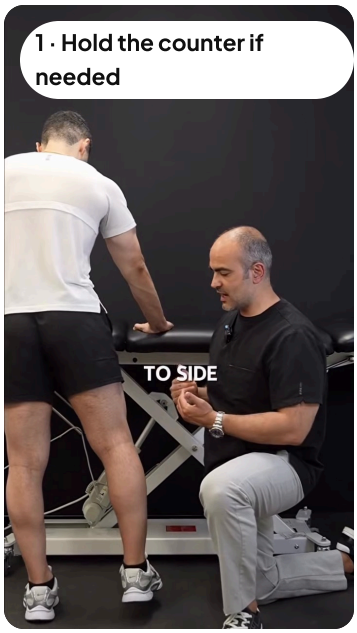
PHASE 2 · 3–6 WEEKS AFTER SURGERY

Exercises to do post ACL reconstruction surgery, Part 2

Goals (from Armin's video description): Achieve full or near-full knee bend and straightening · Regain normal weight-bearing · Work towards normal walking · Keep strengthening both legs · Keep up your cardiovascular fitness

6 Side-to-side weight shifts

Gets you back to normal weight-bearing





1. **Hold on to a kitchen counter** if needed.
2. **Shift your weight side to side.**
3. Every time you land, **activate that quadricep muscle**.
4. Repeat.

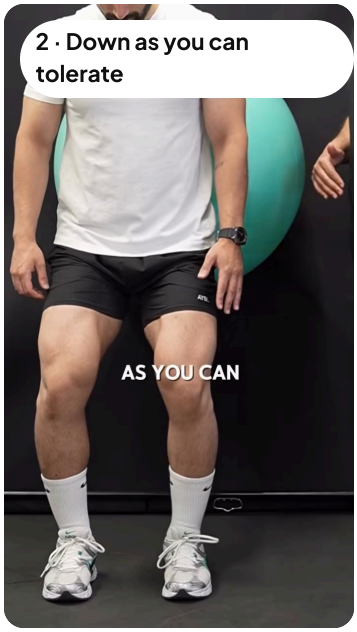
2–3 sets of 10–15 reps, slow and controlled
Suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

7 Wall ball squat

Builds quad strength with support





1. **Place the ball behind your back** against a wall.
2. **Gently lean into it** and go down as much as you can tolerate.
3. **Start slow and progressively go deeper** as you can tolerate.
4. **Come right back up**, activating the quadriceps the whole time.

2–3 sets of 10–15 reps, slow and controlled
Suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

8 Wall calf raise

Strengthens the calves





1. **Gently rest against the wall** for some support.
2. **Go up on those toes.**
3. **Slowly lower down**; make sure your **heels don't touch** on the way down.
4. **Keep that tension on the calf** and repeat.

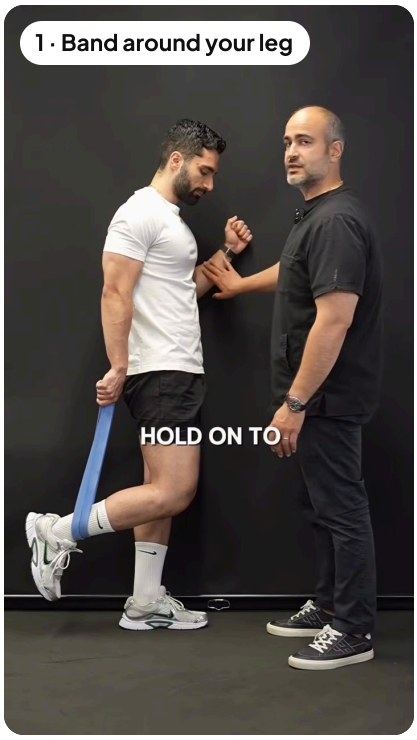
2–3 sets of 10–15 reps, slow and controlled

Suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

9 Standing band quad stretch

Stretches the front of the thigh





1. **Loop a band around your leg**, as shown.
2. **Hold on to something** for support.
3. **Gently bring that leg up**, stretching out your quadriceps as much as you can tolerate.
4. **Hold it for 30 seconds**, slowly lower and repeat.

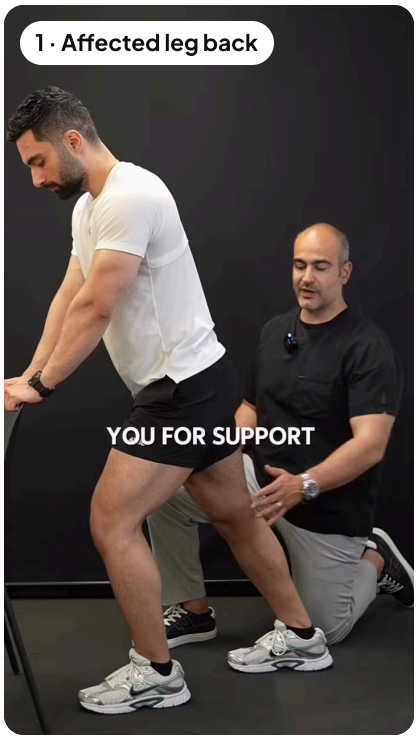
Hold 30 seconds, 2–3 times

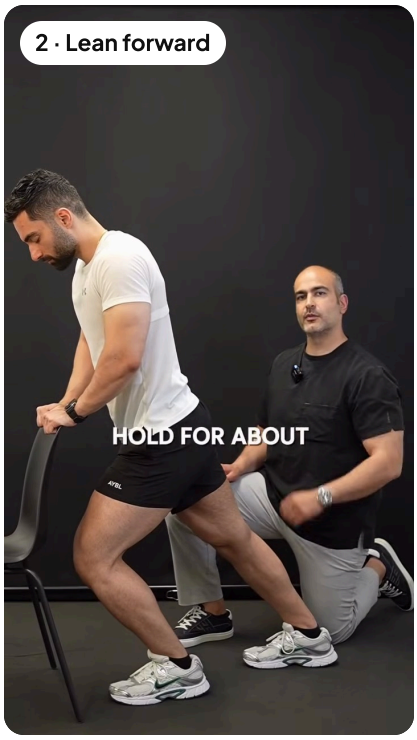
30 s hold from Armin's video; repeats suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

10 Chair calf stretch

Keeps the calf flexible





1. **Have a chair in front of you** for support.
2. Have the **unaffected leg in front** with the knee bent and the **affected leg in the back**, straight.
3. **Lean forward** and you'll feel a nice stretch in the back of the calf.
4. **Hold for about 10 to 30 seconds** and repeat.

Hold 10–30 seconds, 2–3 times

Hold from Armin's video; repeats suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

PHASE 3 · 6–9 WEEKS AFTER SURGERY

Exercise protocol for ACL reconstruction 6–9 weeks post surgery, Part 3

Goals (from Armin's video description): Full, pain-free range of motion · Functional quadriceps strength · Keep up your cardiovascular conditioning · Strengthen the hamstrings without irritating the donor site · Strengthen the whole leg and start gentle balance work

11 Functional squat

Builds functional quad strength





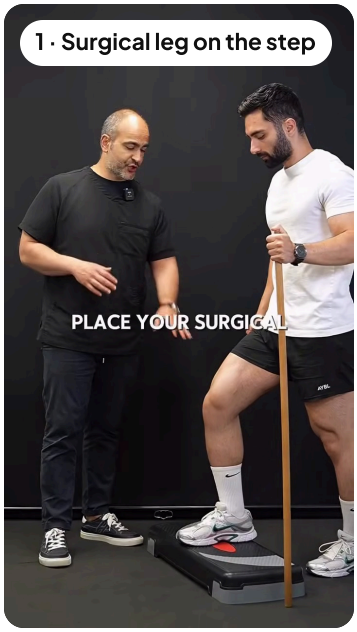
1. You're now ready for more **functional squats**.
2. **Start going down closer to 90 degrees.**
3. **Come right back up.**
4. Make sure your **knees don't cross your toes**, and repeat.

2–3 sets of 10–15 reps, slow and controlled
Suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

12 Step-up

Strengthens the surgical leg for stairs





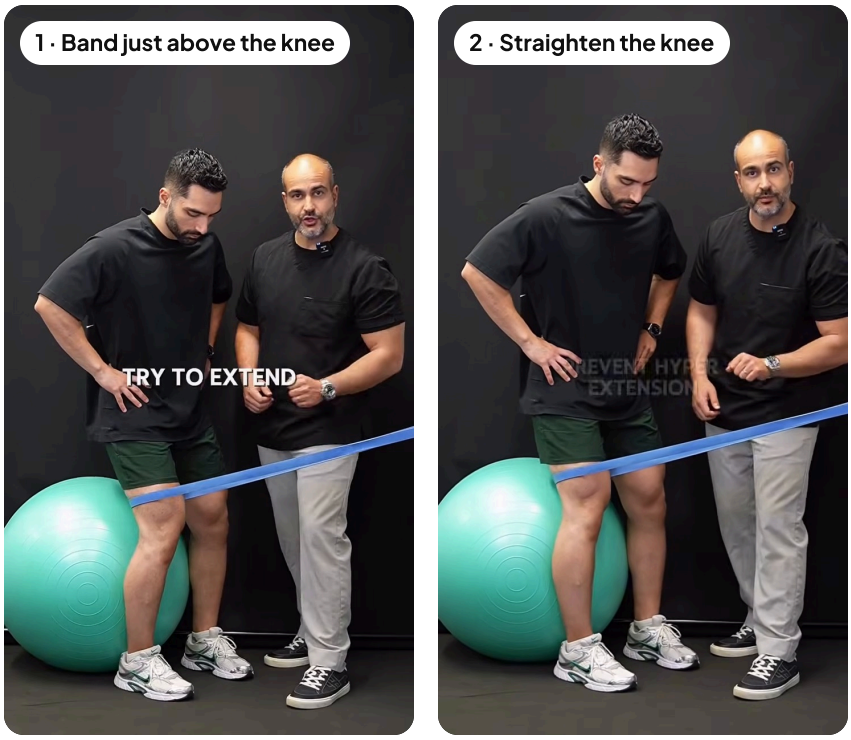
1. **Place your surgical leg on a small step.**
2. **Come right up.**
3. **Slowly go down.**
4. Make sure your **knees aren't crossing your toes**, and repeat.

2–3 sets of 10–15 reps, slow and controlled
Suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

13 Banded terminal knee extension

Works the last part of straightening the knee



1. **Loop a band just above the knee** (anchored in front of you).
2. **Try to extend that knee**, working on terminal knee extension.
3. You can **place a ball behind the leg** to prevent hyperextension.
4. Ease off and repeat.

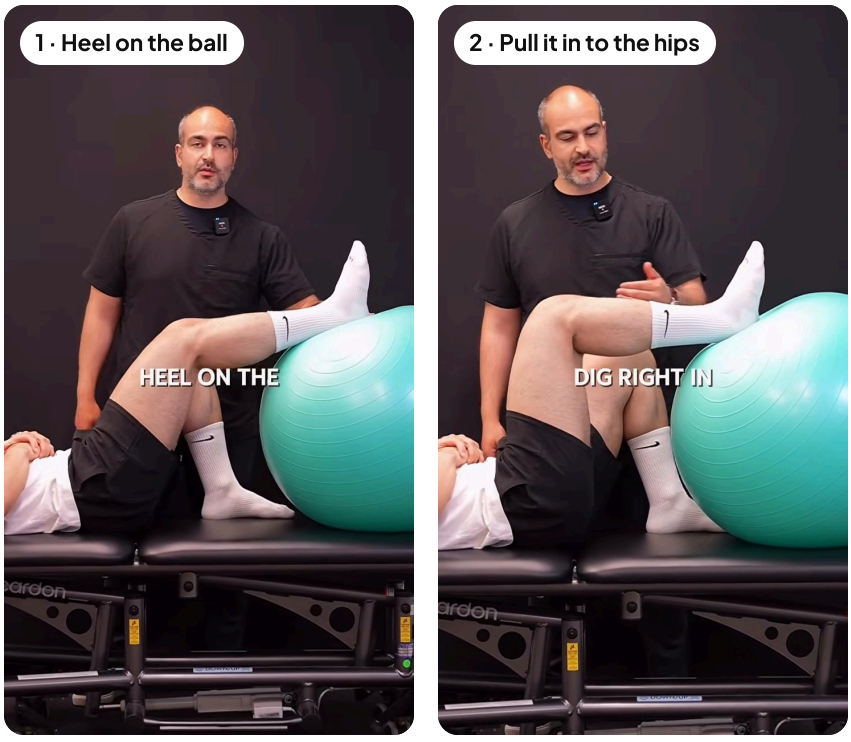
2–3 sets of 10–15 reps, slow and controlled

Suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

14 Ball hamstring curl

Strengthens the hamstrings



1. Lie on your back and **place your surgical heel on the ball**.
2. **Dig right in.**
3. **Pull that ball in towards the hips.**
4. **Go right back out**, working the hamstrings, and repeat.

2–3 sets of 10–15 reps, slow and controlled

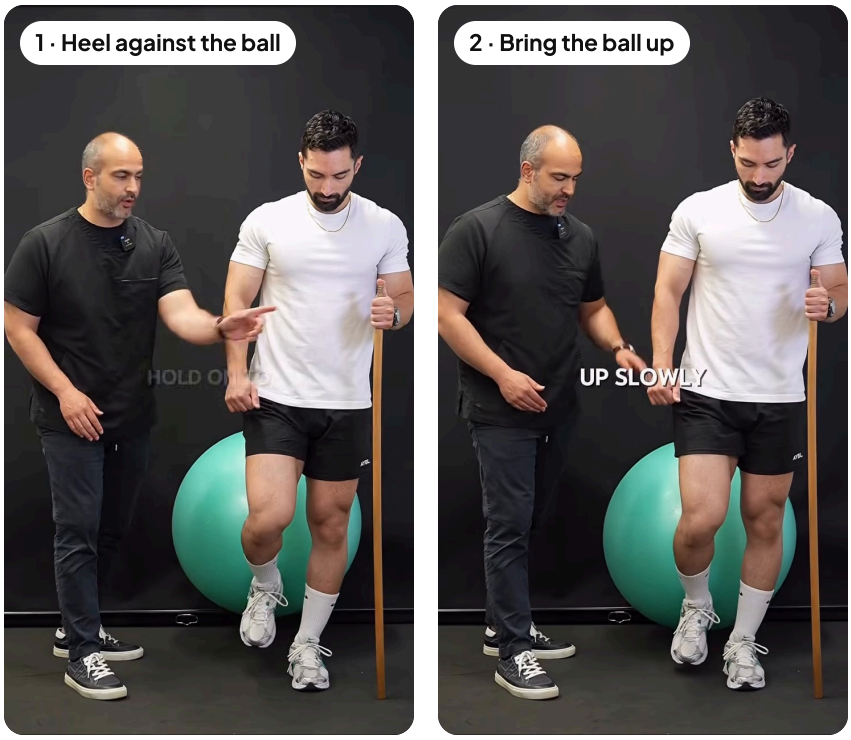
Suggested

Armin's description: if a hamstring tendon was used for your graft, work the hamstrings through the full available range **without irritating or stressing the donor site**.

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

15 Standing ball hamstring curl

Strengthens the hamstrings in standing



1. **Place your heel against the ball** (against the wall, behind you).
2. **Hold on to something** for support.
3. **Bring that ball up** by bending the knee.
4. **Slowly lower down**, working the hamstrings, and repeat.

2–3 sets of 10–15 reps, slow and controlled

Suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

PHASE 4 · 9–12 WEEKS AFTER SURGERY

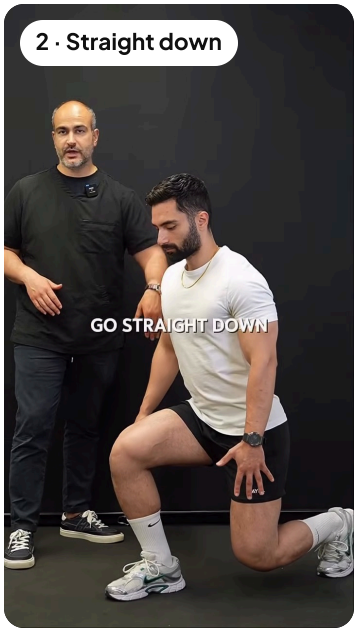
Exercise protocol for ACL reconstruction 9–12 weeks post surgery, Part 4

Goals (from Armin's video description): Continue flexibility exercises · Progress quad strength · Address hamstring strength, especially at end-range bend · Strengthen quads and hamstrings both ways (concentric and eccentric) · Start some balance exercises · Build sport and daily-life fitness

16 Lunge

Builds quad strength for daily life and sport





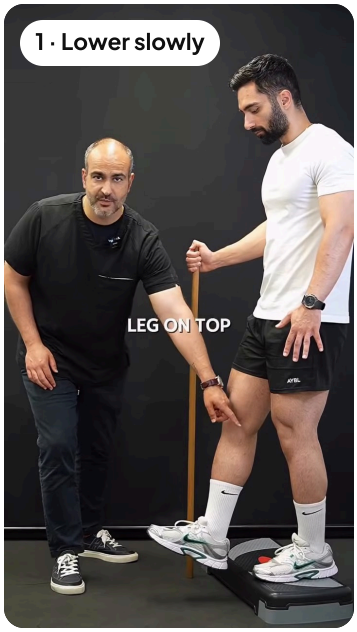
1. Have the **surgical leg in front**, the supported leg in the back.
2. **Go straight down.**
3. **Come right back up**, working those quadriceps.
4. Repeat.

2–3 sets of 10–15 reps, slow and controlled
Suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

17 Eccentric step-down

Works the quads eccentrically (while lengthening)





1. Have the **surgical leg on top of the step** (hold a stick or rail for support).
2. **Slowly lower down.**
3. **Come right back up.**
4. This works your **quadriceps eccentrically**. Repeat.

2–3 sets of 10 reps
Suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

18 Quarter-squat backward walk

Keeps load on the quads while you move



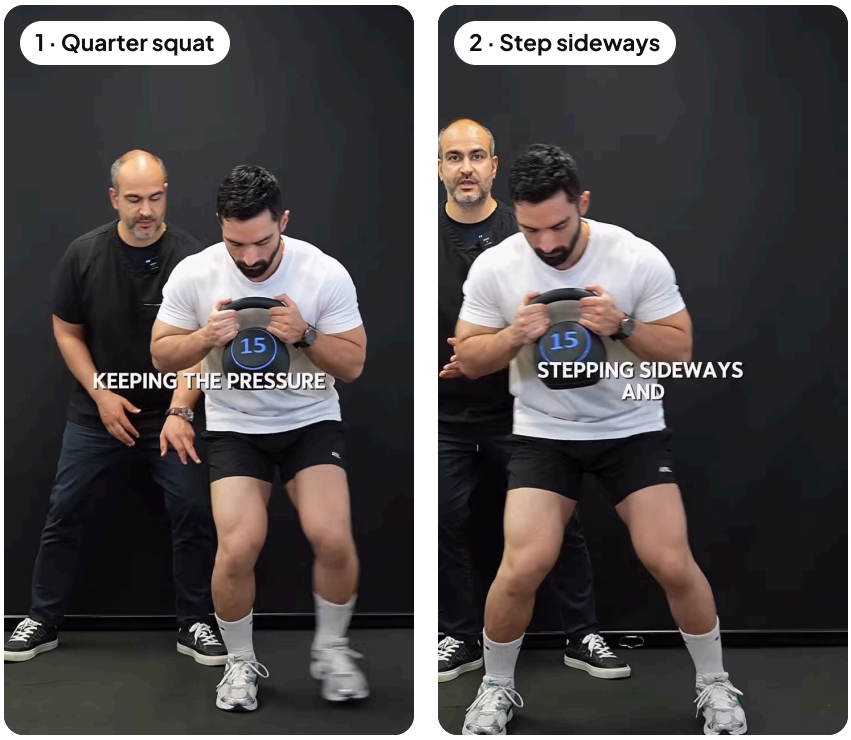
1. **Get into a quarter squat position.**
2. **Start walking backwards**, staying in the quarter squat.
3. Keep the **pressure on the quads** the whole time.
4. Repeat.

3 rounds of about 10 steps (each way for side steps)
Suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

19 Quarter-squat side steps

Keeps load on the quads while you move sideways



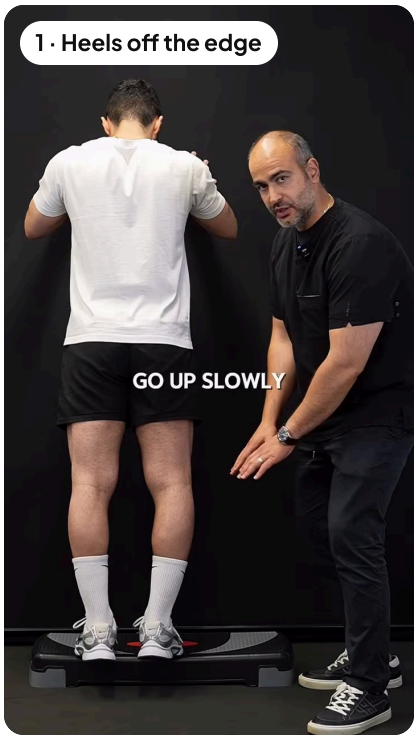
1. **Maintain a quarter squat position.**
2. Keep the **pressure on the quads**.
3. **Step sideways.**
4. Repeat.

3 rounds of about 10 steps (each way for side steps)
Suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

20 Eccentric calf raise on a step

Works the calves eccentrically





1. **Stand at the edge of a step.**
2. **Go up** on your toes, then **slowly lower down**, working the calves eccentrically.
3. **To make this harder**, get less support from the unaffected leg.
4. Go on your toes, slowly lower and repeat.

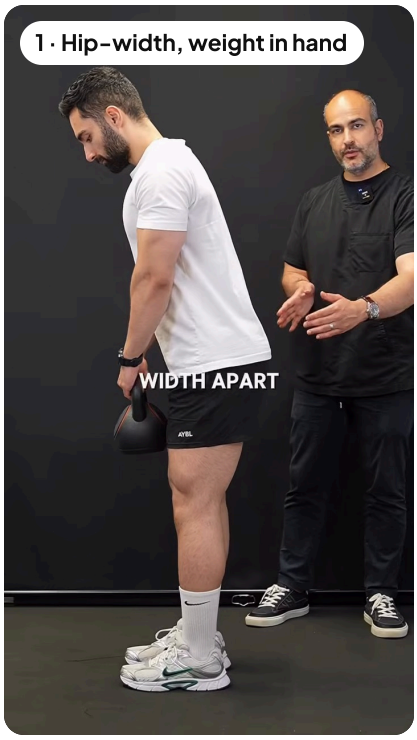
2–3 sets of 10 reps

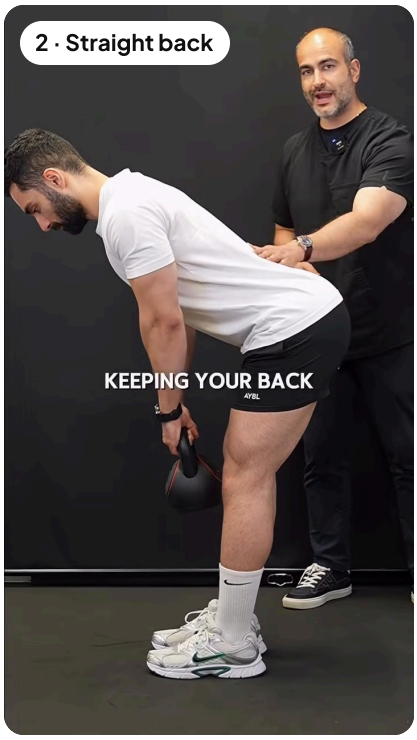
Suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

21 Romanian deadlift

Strengthens the hamstrings





1. **Stand with your feet about hip width apart**, holding a weight.
2. **Slowly lower down**, keeping your **back nice and straight**.
3. **Come right back up.**
4. This works your hamstrings. Repeat.

2–3 sets of 10 reps

Suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

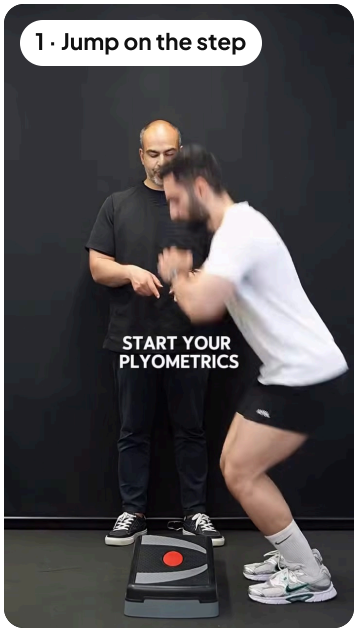
PHASE 5 · 18 WEEKS AND ONWARDS

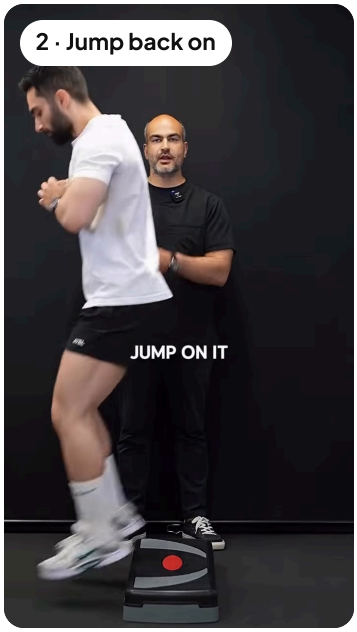
Exercise protocol for ACL reconstruction 18 weeks and onwards, Part 5

Goals (from Armin's video description): Continue flexibility exercises · Progress quad strength · Challenge the hamstrings and quads with sport-specific exercises · Sport-specific balance exercises · Start plyometrics: hopping, jumping and anaerobic work

22 Step jumps (plyometrics)

Starts your plyometric training





1. **Use a step.**
2. **Jump on it**, then jump off.
3. **Turn right around.**
4. **Jump back on**, jump off and repeat.

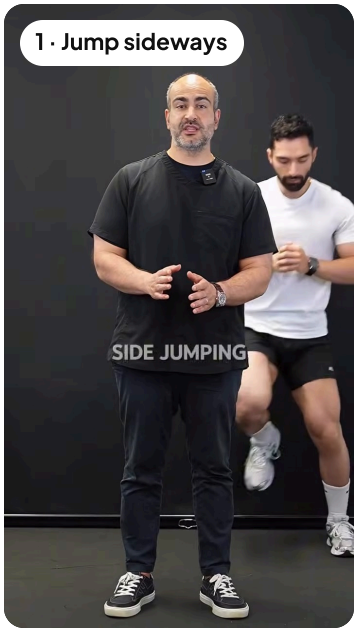
2–3 sets of 6–10, rest between sets
Suggested

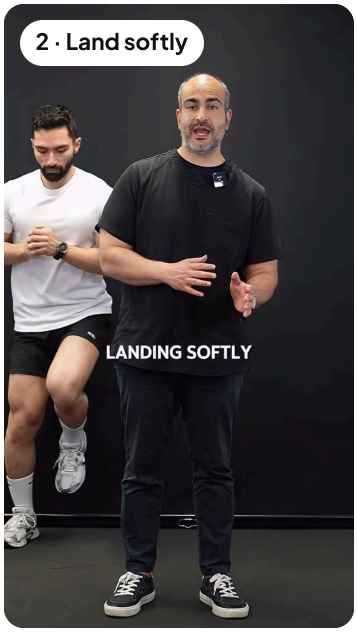
Suggested: only start jumping and hopping once your surgeon or physio has cleared you.

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

23 Side-to-side jumping

Gets the knee ready for jumping and landing





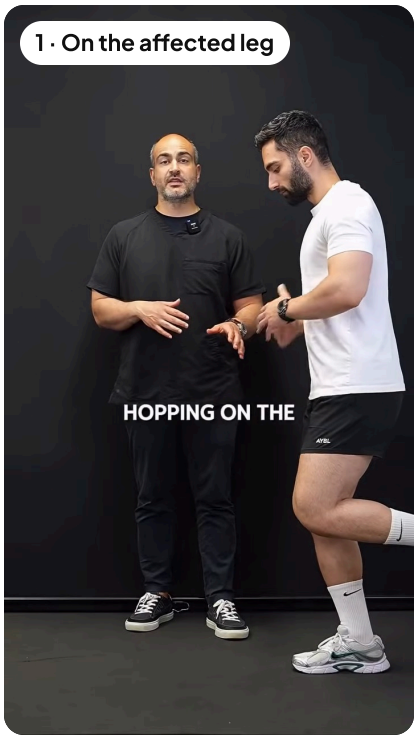
1. **Jump from side to side.**
2. Make sure you're **landing softly**.
3. **Load those tendons.**
4. Repeat.

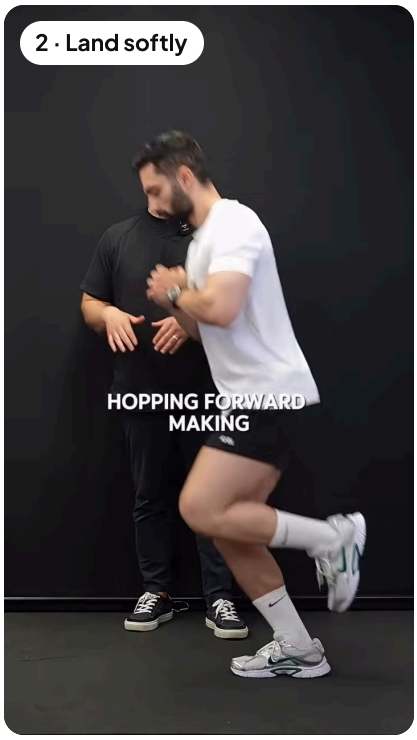
2–3 sets of 6–10, rest between sets
Suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

24 Single-leg hop

Builds landing control on the surgical leg





1. **Stand on the affected leg.**
2. **Hop forward.**
3. Make sure you're **landing softly**.
4. Again, **load those tendons** and repeat.

2–3 sets of 6–10, rest between sets

Suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

25 Single-leg balance toss

Challenges your balance





1. **Stand on one leg.**
2. **Toss a ball to a friend or a wall.**
3. Catch it while keeping your balance.
4. Repeat, then switch legs.

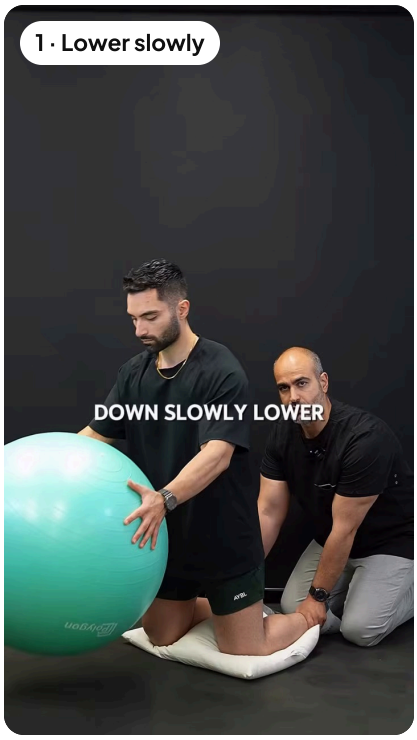
2–3 rounds of 30–60 s on each leg

Suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

26 Ball-assisted hamstring lower

Strengthens the hamstrings and lower body





1. Kneel and **anchor your feet down** (a partner holding them, as shown).
2. **Slowly lower your body** using a ball.
3. **Bounce right back up.**
4. This works your **hamstrings and all the muscles in your lower body**.

2–3 sets of 5–8, slow on the way down

Suggested

Stop if you feel sharp pain, pain above about 4/10 or pain that keeps building, a big increase in swelling, or anything your surgeon has told you to avoid.

SAFETY FIRST

Get checked right away if you have

- **Calf pain, swelling or redness** in either leg
- **Chest pain or shortness of breath** (call 911)
- The wound is **red, hot, leaking**, or you have a **fever**
- Sudden **big increase in swelling** or pain that doesn't settle
- The knee **locks, gives way**, or you felt a **pop**
- **Numbness or weakness** in the leg that's new or getting worse

Call 911 for chest pain or shortness of breath. For the others, contact your surgeon right away or go to the nearest emergency department.

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