

CASE 1 / THERAPEUTIC EXERCISE

Knee pain on stairs: should I treat the ankle or hip?

Casey, 48, wants to descend the 12 stairs at home comfortably while using the handrail. The supervising PT has assessed the pain as patellofemoral pain and found no restriction to graded exercise. During a step-down, Casey's heel rises early and the knee moves forward less on that side.

Pause and decide

What would make you assess above or below the knee—and what would justify treating what you find?

What you learn next

Weight-bearing ankle dorsiflexion is more limited on the symptomatic side. Knee-extensor capacity is also reduced. The hip assessment does not identify a meaningful limitation for this task.

Reason it through

The ankle finding gives you a hypothesis: limited motion may affect how Casey manages the step. It does not prove the ankle caused the knee pain. Consider an ankle intervention if the examination supports it, then recheck the task. Keep education, appropriate knee loading and step practice in the plan. Hip exercise may also help when the assessment and goals support it; a normal strength test alone does not rule it out.

Put it into practice

Try a lower step with the rail to find a manageable starting task. If you trial an ankle intervention, recheck the same step setup before changing other variables. Easier performance on a lower step reflects a changed demand; it does not identify the source of pain.

Reassess

Use the same step height, rail use and number of repetitions. Compare symptoms, control, effort and confidence; later check the actual home-stair goal.

Make it click: Assess nearby joints when the task and examination give you a reason. Treat a relevant finding, not simply a nearby joint.

CASE 2 / THERAPEUTIC EXERCISE

How does this exercise help me lift my child?

Morgan, 35, has persistent low-back pain and wants to lift a toddler from the floor and carry them across the room. The supervising PT has screened and evaluated Morgan and cleared graded lifting. Morgan can do the prescribed bridge but still avoids floor lifting.

Pause and decide

If the bridge is getting easier, why might the patient's goal still feel out of reach?

What you learn next

Morgan has practiced only on the mat. A light box lifted from a raised surface feels manageable, but lifting from the floor feels threatening.

Reason it through

A bridge can train hip and trunk muscle performance when assessment identifies a relevant need. Improvement in the bridge alone does not demonstrate better lifting. The bridge does not reproduce lifting from the floor or carrying. Add graded practice with a box: choose a manageable load and starting height, then work toward the actual task. Explain the purpose of each exercise in the patient's words.

Put it into practice

"We are practicing with this box to work toward lifting your child. We will keep the bridge if it addresses a relevant need." Progress one useful demand, such as lowering the starting surface, while keeping the load and carry distance steady. Select the starting dose from the observed response and recovery.

Reassess

Record the box load, start height, carry distance, effort and confidence, plus symptoms during practice and afterward. Progress toward the agreed real-life goal rather than chasing a larger exercise number.

Make it click: Name the exercise's job: build capacity, practice the task, or both. If you cannot explain the connection, reconsider the choice.

CASE 3 / THERAPEUTIC EXERCISE

They're stronger. Why are stairs still hard?

At follow-up, Casey's knee-extension strength has improved. The first few step-downs look easier, but a full flight at home still feels difficult. Casey has ten minutes for exercise and has been completing only two of the six prescribed exercises.

Pause and decide

Before adding more resistance, what information is missing?

What you learn next

The clinic has tested only a few repetitions. Casey reports that difficulty builds later in the flight, and the home program takes too long to finish.

Reason it through

The strength change is useful, but it does not establish that the stair goal has improved. Reassess repeated stepping, symptom behavior, confidence, rail use and the actual program completed. Reconsider the working explanation if the findings do not fit.

Put it into practice

Agree on a shorter plan Casey can carry out. Prioritize an exercise for the remaining capacity need and graded stair practice; keep supporting exercises only when they have a clear purpose. If repeated stepping reveals a tolerance limit, adjust practice volume or rest to match that finding rather than automatically adding weight.

Reassess

Repeat a consistent stair task and track repetitions or steps, assistance, effort, confidence and recovery. Compare it with Casey's experience at home. New or worsening findings require reassessment, not simply a harder program.

Make it click: Measure the goal as well as the impairment. A stronger muscle is progress; the patient's task tells you whether the plan is transferring.

KEEP BESIDE YOUR CASE NOTES

Can I defend this exercise?

1 / Goal

What does this person need to do, and under what conditions?

2 / Finding

What examination finding plausibly limits that task? A difference alone does not establish a cause.

3 / Exercise job

Am I building capacity, practicing the task, or both?

4 / Starting demand

Which load, range, support and amount can this person manage? Check effort, symptoms and recovery.

5 / Reassessment

What will I repeat with the same setup? How will I check whether it helps outside the clinic?

One-sentence explanation

"We chose ___ because ___ is limiting your ability to ___. We will check ___ to see whether it helps."

How to use these cases

Write your answer before reading the discussion. More than one plan may be defensible. These fictional cases illustrate reasoning after an appropriate assessment; they are not treatment protocols, complete examinations or official NPTE questions. A student implements care within supervision and the established plan of care.

Notes and current references

Original teaching cases developed from the assessment, functioning and exercise-prescription topics in Ben's Therapeutic Exercise notes. Clinical context checked against:

Neal et al. Best practice guide for patellofemoral pain (2024). doi:10.1136/bjsports-2024-108110. Knee-targeted exercise, with hip-targeted exercise and other supports selected for individual needs; not a rule to treat every adjacent joint.

George et al. Interventions for acute and chronic low back pain: revision 2021. doi:10.2519/jospt.2021.0304. Exercise options depend on presentation and assessment.

WHO International Classification of Functioning, Disability and Health.
Revised October 29, 2026.