Exercises for pain in front of the knee joint

Common causes include knee cap arthritis; jumper's knee (patellar tendinopathy); knee cap alignment issues; tight hamstrings

Notes:

the key exercise for you would be the single leg squat, but you may need to work up towards this. Start with the double leg and build it up to single, but don't go into pain in the early stages, only work where you are comfortable, aim to do all one per day, stretches 5 reps each one and squats aim to go to fatigue, muscle tiredness but not pain.

Quarter squat





Stand with your feet pointing forward, placed under the hips/shoulders. Push the hips back and bend the knees to lower yourself slightly (the knees should bend about 30 to 40°).

Keep the knees aligned with the center of your feet. Make sure the knees don't go past the toes.

Single leg squat





Stand on one leg with your foot facing forward. Lower your body by bending the knee, keeping the knee cap aligned with the second toe.

Return to the starting position and repeat.

Keep your knee stable (avoid any lateral movements) during the exercise.

Standing calf stretch on wall





Put the leg to be stretched behind with the heel on the floor and toes pointing directly forward.

Place both hands on the wall and extend the rear knee while pushing the hips forward without bending the back knee until you feel a stretch in your back calf. Hold the stretching position.

Sets: 1 Reps: 5

Standing soleus stretching





Stand and place both hands on a wall, with your feet about half a meter from the wall. Place one leg behind the other and slowly bend the knees while keeping the heels on the floor until you feel a stretch in the calf of the back leg. Maintain the stretch and relax.

Sets: 1 Reps: 5

Stretching hamstring



Lie on your back with your legs straight.
Tie a belt or towel around the foot of the injured leg.
Hold the other end of the belt in your hands.
Lift your leg up keeping it straight and maintain the stretch by pulling on the belt with your hands.
Maintain the stretch and relax.

PS. Occasionally, squats can increase knee pain. It may help to dip less during squatting. By doing so, you can get the benefit of building your muscle strength while limiting the pain.