

Patellofemoral Pain Syndrome (PFPS)



Exploring the what, why and how with STRIVE Sport & Exercise Medicine



What is a Patellofemoral Pain Syndrome?

The patella, or kneecap, is the small bone at the front of your knee. As your knee bends the patella slides up and down to help facilitate smooth movement. In patients with PFPS, the patella can slide incorrectly and rub against other structures which can result in pain. Patients who have PFPS are most likely to experience pain at the front of the knee with squatting, running, prolonged sitting, and going up and down stairs.



Why did I get this?

PFPS can be a complex condition and requires a thorough examination from your healthcare provider to determine the root of the cause. Contributing factors can include training errors such as changing frequency or intensity of exercise without allowing appropriate recovery time. Muscular imbalances and variations in lower limb alignment also contribute to the development of PFPS. These can include weakness in the hip (gluteal) muscles, tightness and/or weakness of the muscles at the front of the leg, knock-knees (genu valgum) or a flat (pronated) foot. These imbalances can lead to altered movement patterns which place more stress on the patella.



How can I get better?

Exercise is a critical component of your recovery. A standard exercise program will focus on strength, stretching and balance. In addition to exercise, activity modification may be necessary to allow your body to recover. Avoiding aggravating activities such as running, squatting and jumping may be necessary in the short term. As your pain decreases you can begin to gradually re-introduce more challenging activities back into your routine. If your symptoms persist then you can speak to your health care provider about next steps including manual therapy, bracing and other therapeutic options.

4 Exercises for you

Exercise: Side Lying Leg Lift
Goal: Strength



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1. Begin in a side lying position with your bottom leg bent to 90 degrees at the hip and knee.
2. Keep your top leg straight. Move your top leg slightly behind you (hip in slight extension). Keep your hips stacked one on top of the other.
3. Rotate your top leg so your heel points toward the ceiling.
4. Lift the top leg away from the floor, leading with your heel and maintaining hip extension. Lower and repeat.

Parameters: 3 sets of 10 repetitions. Perform once per day, every other day.

Exercise: Monster Walks
Goal: Strength

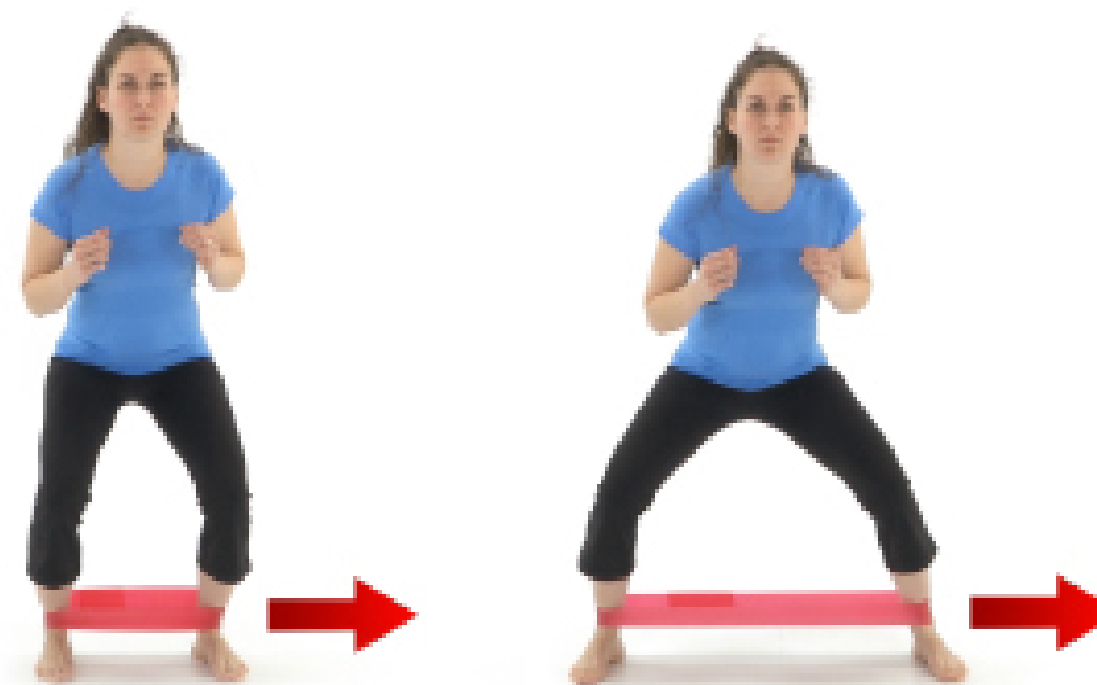


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1. Place a mini-band over the ankles.
 2. Bend your knees slightly and take a step sideways. Initiate the movement using the muscles at the side of your hip without allowing the knees to collapse inward.
 3. Keep the toes pointing forward at all times.
- Parameters:** Take 10 side steps each way. Take a 1 minute break and repeat 4 times. Perform once per day, every other day.

Exercise: Bridge
Goal: Strength



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1. Lie on your back with your knees bent.
2. Engage your core. Maintain that activation while continuing to breathe normally.
3. Contract your buttocks while lifting your buttocks off the ground until your trunk is aligned with your legs.
4. Slowly return to the initial position and repeat.
5. To increase the challenge, you can place a band around your thighs. Make sure you keep the band tight by not allowing your knees fall in.

Parameters: 3 sets of 10 repetitions, Perform once per day, every day.