

Patello-Femoral Syndrome

Complaints

- Generalized pain around the patella (knee cap)
- Tenderness around the patella
- Increased knee pain with running and walking activities

Possible Causes

- Muscular imbalance in the quadriceps
- Excessive pronation
- Soft, unstable shoes

Shoe Profile

For moderate to excessive pronators, the long axis of the shoe should provide maximum torsional control of medial foot rotation (pronation) during the weight bearing phase of the gait cycle. Proper support provides better alignment for the patella and allows the quadriceps to function more efficiently.

Orthotics

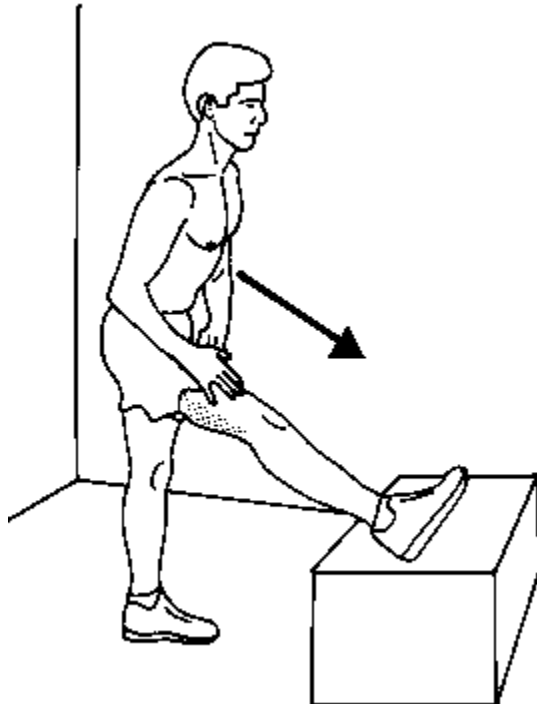
Neutral (mild pronators) – Over-the-counter arch supports may be beneficial
Moderate to excessive pronators – Custom orthotics

Exercises

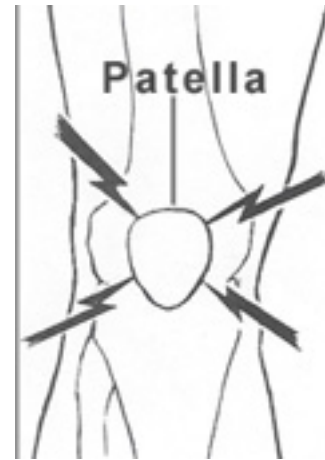
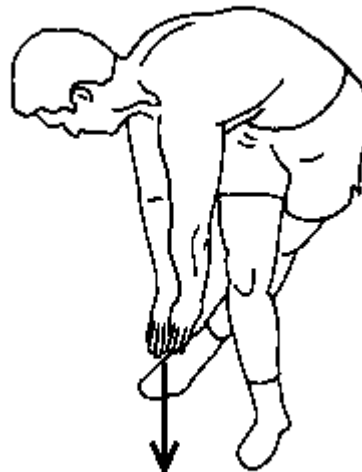
****Please consult your physician before engaging in an exercise program.****

With all strengthening exercises, start with 3 sets of 10 repetitions. If you experience any sort of pain reduce your reps to 3 sets of 5. For all stretches, repeat 3 times holding each stretch for 30 seconds to 1 minute. Using RICE (Rest, Ice, Compression, Elevation) can be beneficial in the treatment of injuries as well.

Standing Hamstring Stretch

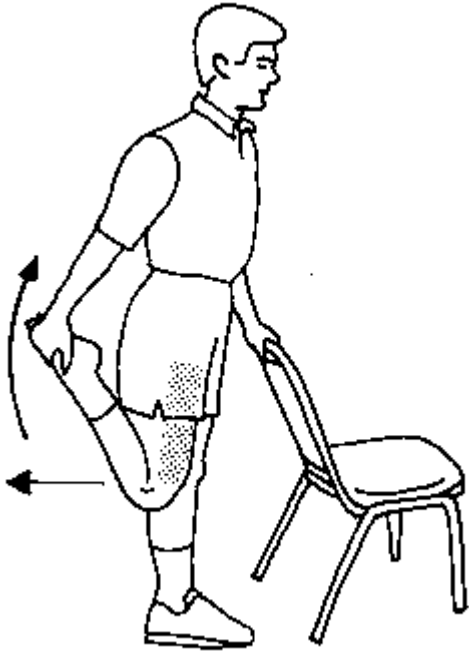


Standing IT Band Stretch



1. Stand facing a chair and place heel of foot of leg to be stretched on seat of chair.
2. Keep knee and trunk straight throughout exercise.
3. Lean trunk forward, bending at hips and hold.
4. Return to the starting position, relax and repeat.

Standing Quadriceps Stretch

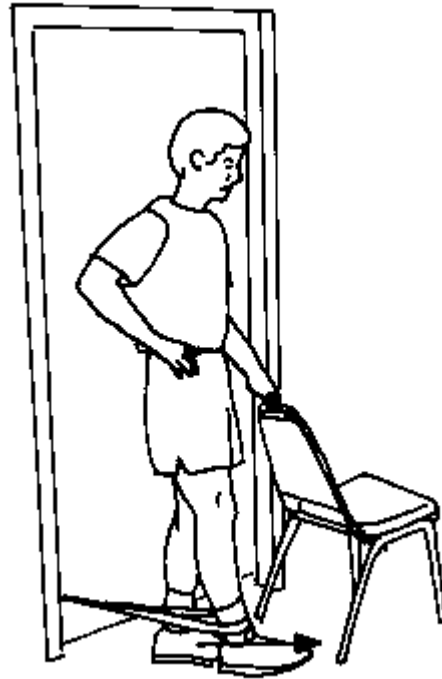


1. Stand facing stable object, i.e. chair, used for balancing.
2. Bend knee and grasp top of foot with hand.
3. Pull up on foot bringing heel toward buttock, push knee back behind hip if possible and hold.
4. Return to starting position, relax, and repeat.

Leg In Elastic Exercise

1. Stand in a spacious area with room to bend to the side.
2. Cross the leg to be stretched behind the other leg.
3. Tip trunk to the opposite side of the leg to be stretched and reach towards the floor with both hands and hold.
4. Return to the starting position, relax and repeat.

Leg Forward Elastic Exercise

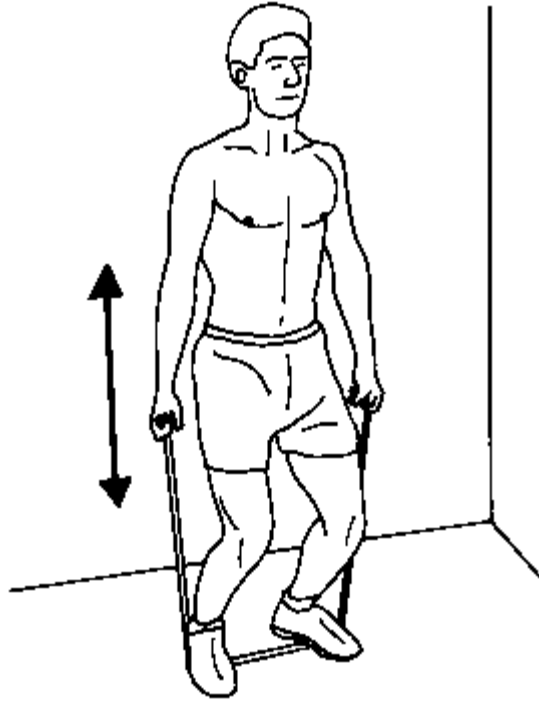


1. Attach elastic (Theraband) at ankle level and stand facing away from attachment with elastic looped around leg at ankle.
2. Pick up slack by stepping away from attachment.
3. Stand with erect posture and keep trunk stable during exercise.
4. Pull forward with leg against elastic
5. Slowly return to starting position and repeat.

Standing Squats Elastic Exercise

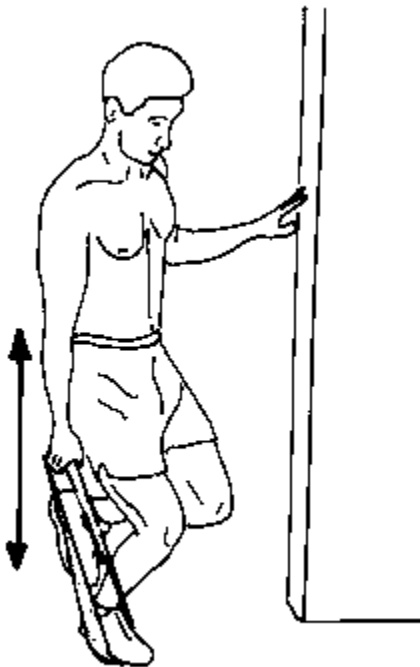


1. Attach elastic (Theraband) at ankle level and stand with attachment to side with elastic looped around the leg at ankle.
2. Pick up slack by stepping away from attachment.
3. Stand with erect posture and keep trunk stable during exercise.
4. Pull in with leg against elastic.
5. Slowly return to starting position and repeat.



1. Stand on both legs, feet shoulder width apart, and elastic (Theraband) looped under both feet.
2. Squat down and grasp elastic in both hands.
3. Keep good erect position of spine throughout exercise.
4. Straighten knees pulling up against elastic and move to a standing position.
5. Slowly return to a squat position and repeat.

Unilateral Standing Squats Elastic Exercise



1. Stand behind chair for balance, loop elastic under foot and grasp elastic in hand.
2. Bend UNINVOLVED knee so standing on one leg.

3. Balancing against back of chair or wall, bend knee and squat keeping good erect position of the spine.
4. Push up against the elastic by straightening the knee.
5. Slowly return to squatting position and repeat.

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