# Femoroacetabular Impingement Exercise Handouts

Prepared by **Dr. Saint-Vil** Last update: 07/27/2022



Femoral acetabular impingement is a condition when there is a formation of bone spurs either on the femoral head or pelvic acetabulum (socket) or even on both of them. Thus, these bone overgrowths start limiting the joint motion due to friction between them. Hence the joint is not able to move smoothly. Not only that, but it may also cause increased inflammation of the surrounding tissues.

The hip joint is the largest ball and socket joint in the body. It is a joint between the pelvis bone and thigh bone (femur). There is a round socket (acetabulum) in the pelvic bone, and a large ball-like head of femur bone glides in it. The acetabulum is surrounded by a fibrous tissue called the labrum.

In FAI, there might be either a bone overgrowth of the rim of the acetabulum (called pincer impingement) or of the femoral head (cam impingement), or of both the bones (combined impingement).

Some exercises can help in femoral acetabular impingement treatment. Many such exercises can be done readily at home without any specific equipment like the exercises listed below.

### - Supine figure 4 piriformis stretch

**Step 1 –** Lie on the floor/mat with one of the legs crossed over the other at the knees, and both legs bent.



**Step 2 –** Gently pull the lower knee towards the shoulder on the same side of the body until a stretch is felt.



Step 3 – Hold the stretch for 30 seconds, then slowly return to starting position.

- Repeat 4-6 for each side
- 3 sets in a row

- Once-daily
- 5 days a week

### - Half-Kneeling Hip flexor stretch

**Step 1** – Start by kneeling on the yoga mat. Next, move one of your feet forward like in lunges, ensuring that the knee is directly above the ankle. Now place both the hands on the knee of the extended leg.



**Step 2 –** Stretch your hip flexor by moving forward. At the same time, squeeze the glutes of other hips



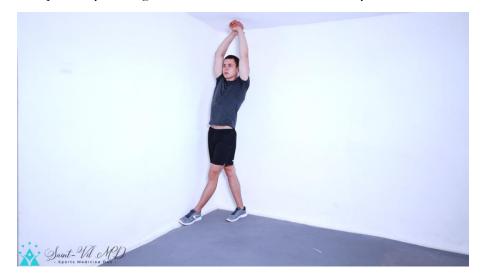
**Step 3 –** Hold the position for 30-45 seconds

- Repeat 10 times
- 3 sets in a row
- Once-daily

• 5 days a week

#### - Iliotibial band stretch at the wall

**Step 1 –** Stand along with a wall with legs crossed with the body at 90 degrees to the wall, not parallelly; the leg on the front must be the one away from the wall.



**Step 2 –** Bend to the opposing side. If the right side is towards the wall, then bend towards the left side, and a little bit backward



Step 3 – Follow this by bending downwards for the maximum stretch of ITB



- Repeat 8-10 times
- 2 sets in a row
- Once-daily
- 5 days a week

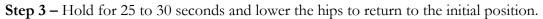
# - Supine bridge

**Step 1** – Tighten your abdominal and buttock muscles by pushing your low back to the ground.



**Step 2** – Raise your hips to create a straight line from your knees to your shoulders. Next, tighten your abdominal muscles and draw your belly button toward your spine.





- Repeat 8-12 times
- 3 sets in a row
- Once-daily
- 5 days a week

#### - Sidelying hip abduction

**Step 1 –** Raise your upper leg to just above your hip joint, at the same time, exhaling as you go. Once you feel your hips and back start to get tense, stop and hold the position for a couple of seconds.



**Step 2 –** Gradually lower your leg to its initial position on an inhale. Keep the upper leg straight and fixed directly above the lower leg.



Step 3 – Flip over to your opposite side and repeat the action with your other leg.

- Repeat 10-12 times
- 3 sets in a row
- Once-daily
- 5 days a week

### - Supine March

**Step 1 –** Lie with your bend knees on your back.



Step 2 – Lift one leg by tightening the lower abs. Raise the leg slowly as if marching.



**Step 3 –** Bring the lifted leg to the floor and start lifting the other leg.



**Step 4 –** Do not lift legs too high above the floor, and remember that it is marching and not cycling, so do not move or bend the knees.

- Repeat 20 times
- 3 sets in a row
- Once-daily
- 5 days a week

#### - Clamshell with resistance

**Step 1** – Start this exercise by lying on the side with knees bent at forty-five degrees. Next, rest your head on your lower arm, and use your top arm to steady your frame.



**Step 2 –** Rest your head on your lower arm, and use your top arm to steady your frame. Involve your abdominal muscles by drawing your belly button in, as this will help steady your spine and pelvis. Keeping your feet touching, raise your upper knee as high as possible without shifting your hips or pelvis. Don't move your lower leg off the floor.



- 3 sets in a row
- Once-daily
- 5 days a week

#### - Side stepping with resistance at ankles

**Step 1 –** The exercise is more or less self-explanatory. You wear the resistance band at the ankles while standing in a relaxed position.



Step 2 – Next is to step to the side against the band's resistance.



**Step 3 –** Step to alternate side

- Repeat 10-12 times
- 3 sets in a row
- Once-daily
- 5 days a week

# - Band walks

Step 1 – Stand with your legs and hip apart, then put a band just above the knees.



Step 2 – Squat down and take a small step to the left.



**Step 3 –** Take ten to twenty steps to the left and then to the right.



- Repeat 10-12 times
- 3 sets in a row
- Once-daily
- 5 days a week

### - Supine double knee to chest

**Step 1 –** Lie straight on the back.



**Step 2** – Bend your knees and tighten your lower abdomen so that your knees touch your chest and you feel a stretch in the lower back.



**Step 3 –** Hold in the position with the help of both hands for 5 seconds.

- Repeat 10-12 times
- 3 sets in a row
- Once-daily
- 5 days a week

# - Bird dog

**Step 1 –** Kneel on your knees, then bend and put your hands on the floor too, forming a pose like a dog or any other quadruped



**Step 2** – Once in a pose like a dog, raise your one arm straight in front, which should now be parallel to the ground. Similarly, raise or extend your opposite leg to ensure it is straight, extended, and parallel to the floor. Again, make sure to keep the back straight.



Step 3 – Hold in the position for a few seconds, and then switch to the other side



- Repeat 8-10 times
- 3 sets in a row
- Once-daily
- 5 days a week

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