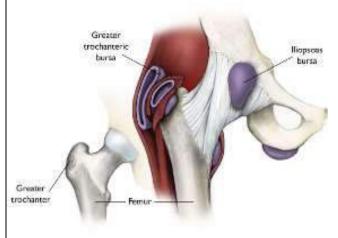
ILIOPSOAS TENDONITIS / BURSITIS





What is the Iliopsoas and Bursa?

The **iliopsoas** is a muscle that runs from your lower back through the pelvis to attach to a small bump (the lesser trochanter) on the top portion of the thighbone near your groin. This muscle has the important job of helping to bend the hip—it helps you to lift your leg when going up and down stairs or to start getting out of a car. A fluid-filled sac (**bursa**) helps to protect and allow the tendon to glide during these movements. The iliopsoas tendon can become inflamed or overworked during repetitive activities. The tendon can also become irritated after hip replacement surgery.

Signs and Symptoms

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Iliopsoas issues may feel like "a pulled groin muscle". The main symptom is usually a catch during certain movements such as when trying to put on socks or rising from a seated position. You may find yourself leading with your other leg when going up the stairs to avoid lifting the painful leg. The pain may extend from the groin to the inside of the thigh area. Snapping or clicking within the front of the hip can also be experienced. Do not worry this is not your hip trying to pop out of socket but it is usually the iliopsoas tendon rubbing over the hip joint or pelvis.

Treatment

Conservative treatment in the form of stretching and strengthening usually helps with the majority of patients with iliopsoas bursitis. This issue is the result of soft tissue inflammation, therefore rest, ice, anti-inflammatory medications, physical therapy exercises, and/or injections are effective treatment options.

- □ **<u>REST</u>** Avoid aggravating activates that involve repetitive hip motions
- □ **ICE** Apply ice for 15-20 minutes to the front of the hip joint area every 6-8 hours.
- ANTI-INFLAMMATORY MEDICATIONS nonsteroidal anti-inflammatory drugs (NSAIDs) (Ibuprofen, Naproxen, Meloxicam) or Acetaminophen may help decrease the pain and swelling. You can also try topical creams/gels, such as diclofenac or capsaicin to help dull the pain.
- INJECTIONS You may be a candidate for a steroid injection into the iliopsoas tendon or bursa to help with pain and swelling
- EXERCISES An exercise program is recommended to address the affected muscles



The American Association of Hip and Knee Surgeons (**AAHKS**) has formulated a set of stretching and strengthening exercises to help with your iliopsoas issues. Remember it may take 4-6 weeks to see improvement in the pain and discomfort. If the pain does not subside after this time period, we encourage you to contact your physician. Remember surgery is rarely needed for these conditions. An injection combined with an exercise program is usually the most effective way to address iliopsoas bursitis.

GENERAL TIPS FOR EXERCISING

- □ Talk to your healthcare provider first
- □ Stretch SLOWLY and in a controlled manner, avoid sudden or rapid motions
- □ Hold the stretch to the point you feel mild discomfort and relax as tolerated
- □ MODIFY STRETCHES TO ACCOMMODATE FOR A PRIOR HIP OR KNEE REPLACEMENT

You can expect some soreness when you first start a stretching program

DISCLAIMER

PLEASE USE THESE EXERCISES AS A GUIDE AS IT IS <u>ULTIMATELY BETWEEN YOU AND YOUR SURGEON</u> TO DECIDE WHICH EXERCISES ARE RIGHT FOR YOU. IF YOU EXPERIENCE ANY ABNORMAL DISCOMFORT, DIZZINESS, OR FEELINGS OF PASSING OUT, PLEASE STOP EXERCISING AND CONTACT YOUR PHYSICIAN AS SOON AS POSSIBLE.





STRETCHING EXERCISES



Stretching and strengthening exercises are key to managing iliopsoas issues. A good stretching routine should be performed **2-3 times a day** to keep your hip muscles from getting too tight. In the beginning, we recommend stretching morning and evening. As your muscles become more flexible, you can then stretch once a day to keep the muscles limber. It is recommended that your exercise program **begin and finish** with stretches.

GENERAL TIPS FOR STRETCHING EXERCISES:

- □ Warm-up: Complete the stretching exercises before strengthening exercises
- Perform slow steady motions until you feel a TOLERABLE DISCOMFORT; adjust tension to your comfort
- □ Hold for the position up to **30 seconds** as tolerated, and at least for a minimum of 5 seconds
- □ Slowly return to the original starting position
- □ Take a deep breath and **relax for 5 seconds** between repetitions
- Cool-down: Apply ice to the trochanter region of the hip for 5-10 minutes after your exercise routine



PRESS UPS



This is a **SIMPLE** exercise to stretch the iliopsoas tendon. You can control how much stretch is on the muscle by adjusting how high you push up with your arms. We recommend pushing up until a tolerable stretch is experienced. It is good to relax face down on a mat for a few minutes before starting this exercise.



- Begin by resting on your forearms with your hands in front of your shoulders
- 2. Gently push up and support your upper body with your hands



HOLD

STRETCH

SECONDS

OF

SETS

3

REPS

PER SET

5 - 10

- Keep your pelvis and legs relaxed and extend your back. You should feel a stretch within the front part of your groin
- 4. Try to hold for **30 seconds**
- 5. Slowly return to the starting position.

EXERCISE MODIFICATION

HIP REPLACEMENT: Please check with your surgeon before performing this particular exercise. You may need to limit your motion based on your surgeon's guidelines





QUADRICEPS STRETCH

This stretch should be performed after the Press Up exercise. You will need a chair or countertop for balance during this exercise. Remember that you can control how much stretch is on the muscle by adjusting how far you bend your knee. You should feel a stretch in your groin during this exercise. **This stretch should be performed on both legs.**

- **1.** Begin by grabbing our knee with your hand as you balance on the opposite foot
- Slowly pull your foot toward your buttocks until you experience a tolerable stretch along the front of your thigh. (For a more ADVANCED stretch, you can try to move your thigh backwards as you pull up on your foot)
- 3. Try to hold for 30 seconds
- 4. Slowly return to the starting position





EXERCISE MODIFICATIONS

HIP REPLACEMENT: Please check with your surgeon before performing this particular exercise – You may need to limit your motion based on your surgeon's guidelines



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HIP ADDUCTOR STRETCH



The hip adductors are a group of muscles on the inner aspect of your thigh. Stretching the different groups of muscles around the hip will help ensure balanced muscles. This stretch can be performed in two different ways, lying on your back or sitting on the floor. Be sure to check with your surgeon before attempting the ADVANCED STRETCH. This exercise should be performed on both legs.

SIMPLE STRETCH



REPS HOLD # OF PER SET STRETCH SETS 5 - 103

1. We recommend lying on your back

- 2. Remember to keep your toes pointed toward the ceiling and your knee straight
- 3. Slowly move your leg out to the side until a comfortable stretch is felt in your groin
- 4. Try to hold for 30 seconds before returning to the starting position

EXERCISE MODIFICATIONS

HIP REPLACEMENT: Please check with your surgeon before performing this particular exercise – You may need to limit your motion based on your surgeon's guidelines

KNEE REPLACEMENT: You should bend the knee to a comfortable position that does not place additional stress on your knee replacement(s)

ADVANCED STRETCH



- 1. We recommend sitting on the floor or a firm surface
- 2. Next try to put soles of your feet together out in front of you the best you can (Remember to sit with your back straight and place your hands on your knees)
- 3. Slowly press your knees down towards the floor until a comfortable stretch is felt in your groin
- 4. Try to hold for **30 seconds** before returning to the starting position





HAMSTRING STRETCH SEATED



The hamstrings are a group of muscles on the back of your thigh. Tight hamstrings can contribute to iliopsoas bursitis. Stretching the different muscle groups around the hip will help ensure balanced muscles. We present three different ways to perform a hamstring stretch. Please select an option that both you and your surgeon are comfortable with. Remember that the hamstring muscles can be stretched differently depending on which position you choose. Therefore we recommend alternating the hamstring stretch from time to time. **This exercise should be performed on both legs.**

- Begin by sitting in a hardback chair, prop your leg on a stool or chair directly in front of you
- While keeping your back straight, slowly reach for your toes while at the same time keeping your knee straight. (You will feel a stretch along the muscles in the back of your thigh)
- **3**. Try to hold for **30 seconds** before slowly returning to the starting position.

EXERCISE MODIFICATION HIP REPLACEMENT: Please check with your surgeon before performing this particular exercise – You may need to limit your motion based on

your surgeon's guidelines

OF

SETS

3

SECONDS

REPS PER SET STRETCH 5-10 5-30



HAMSTRING STRETCH (ADDITIONAL OPTIONS)



Here are two other methods of stretching the hamstring muscles while lying on your back or standing. You can use any position that is most comfortable for you. **This exercise should be performed on both legs.**



- **1.** While lying on your back, place a towel or cord around the bottom of your foot.
- While keeping your knee straight, slowly pull your leg in an upward direction using the towel to pull higher. (You will feel a stretch along the muscles in the back of your thigh)
- 3. Try to hold for 30 seconds
- 4. Slowly return to the starting position

OR

- 1. While standing, place your foot on a stool or chair.
- 2. While keeping your knee straight, slowly bend forward to touch your toe. (You will feel a stretch along the muscles in the back of your thigh)
- 3. Try to hold for 30 seconds
- 4. Slowly return to the starting position

EXERCISE MODIFICATIONS

HIP REPLACEMENT: Please check with your surgeon before performing this particular exercise – You may need to limit your motion based on your surgeon's guidelines

KNEE REPLACEMENT: You should bend the knee to a comfortable position that does not place additional stress on your knee replacement(s)





REPS PER SET 5-10

HOLD STRETCH 5-30 SECONDS # OF

SETS

3

8



STRENGTHENING EXERCISES



Iliopsoas issues usually respond well to stretching and strengthening exercises. It is important to exercise the leg muscles in different ways to improve overall function. Slight muscle discomfort can be expected. These exercises should **NOT** cause pain. If your do experience pain, back off and modify your technique. If pain is still present, we recommend avoiding the particularly painful exercise. Exercise bands or ankle weights can be added to most of these exercises to increase the degree of difficulty. We begin by presenting simple exercises and then progress to more **ADVANCED EXERCISES**.

GENERAL TIPS FOR STRENGTHENING EXERCISES

- □ Warm-up: Complete the prior stretching exercises first
- Perform slow steady motions until you feel a TOLERABLE STRETCH and adjust tension to your comfort
- □ Hold the position for up to 5 seconds before slowly returning to the starting position
- □ Take a deep breath and relax for 1-2 seconds
- □ Repeat for 3 sets of 5-10 repetitions as tolerated
- Cool-Down: Apply ice to the trochanter region of the hip for 5-10 minutes after your exercise routine



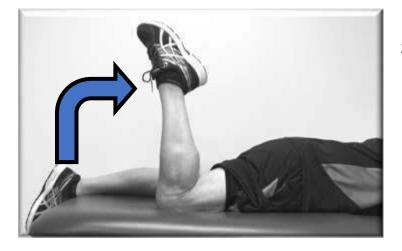
PRONE KNEE BENDS



This **SIMPLE** exercise directly works the hamstring muscles on the back of your thigh while stretching the iliopsoas as the same time. To perform this exercise, we recommend lying on your stomach on a comfortable surface. Keep the front part of your thigh in contact with the surface at all times. Ankle weights or exercise bands can be added to increase the degree of difficulty. **This exercise should be performed on both legs.**



- Point your toes away as if you were pushing on a gas pedal
- **2.** Slowly bend your knee up until your lower leg points towards the ceiling.



3. Hold the bend for **5 seconds** before slowly returning your leg to the starting position.





HEEL SLIDES



Heel slides work the Iliopsoas and hamstring muscles. To perform this exercise, we recommend lying on your back on a soft surface or mat. We also recommend performing this exercise while **wearing socks** so your foot can slide easier. Remember to keep your knee pointing toward the ceiling at all times. **This exercise should be performed on both legs.**



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- Slowly bend your knee and slide your heel back toward your buttock until a comfortable pull is felt at the front of your knee
- Try to hold the position for 5 seconds before SLOWLY pushing your knee straight until the back of your knee rests against the surface





EXERCISE MODIFICATIONS HIP REPLACEMENT: Please check with your surgeon before performing this particular exercise – You may need to limit your motion based on your surgeon's guidelines



HIP ABDUCTION/ADDUCTION



This particular exercise is to help build strength in the muscles around the hip. When performing this exercise, we recommend using a chair, counter, or railing for balance. Remember to keep your back straight for this exercise. Exercise bands or ankle weights can be added to increase the degree of difficulty. **This exercise should be performed on both legs.**



SIMPLE (STANDING)

- 1. Begin by slightly rotating your toes toward the side
- 2. While keeping your knee straight, slowly move your leg out toward the side (You will feel the muscles on the side of your hip tighten)
- **3.** Try to hold the end position for **5 seconds** before slowly returning your leg to the starting position



EXERCISE MODIFICATIONS

HIP REPLACEMENT: Please check with your surgeon before performing this particular exercise – You may need to limit your motion based on your surgeon's guidelines

KNEE REPLACEMENT: You should bend the knee to a comfortable position that does not place additional stress on your knee replacement(s)

ADVANCED (SIDE-LYING)

- 1. Start by rotating your toes so they are pointing towards the ceiling
- While keeping your knee straight, slowly raise your leg toward the ceiling until a comfortable stretch is felt in your groin. (You will feel your outer hip muscles tighten)
- **3.** Try to hold the end position for **5 seconds** before slowly returning your leg to the starting position





STRAIGHT LEG RAISE



This exercise directly works the iliopsoas muscle therefore it should be performed **after you become familiar with the previous exercises**. To perform this exercise, we recommend lying on your back on a soft surface or mat. To take pressure off your back, your opposite leg should be comfortably resting in a bent position with the foot on the ground. Remember to slowly control the leg against gravity and do not let the leg drop back to the ground. **This exercise should be performed on both legs.**



- Begin by tightening your thigh muscles with your toes pointed toward the ceiling
- 2. Slowly lift your entire leg off the ground while keeping your knee straight
- **3.** Try to bring your leg up until your thighs are at the same level



 Try to hold your leg up for 5 seconds and then SLOWLY return your leg to the starting position





exercise – You may need to limit your motion based on your surgeon's guidelines

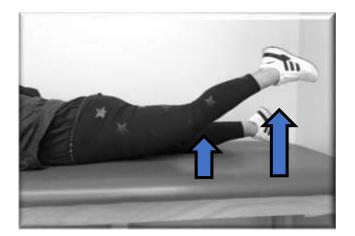


PRONE KNEE EXTENSION

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This **ADVANCED EXERCISE** works the hip, buttock, and hamstring muscles. We usually recommend this exercise **after straight leg raises and abduction/adduction exercises become easier**. To perform this exercise, we recommend lying on your stomach on a comfortable surface. Remember ankle weights can be added to increase the degree of difficulty of this exercise. **This exercise should be performed on both legs.**





- 1. Point your toes away as if you were pushing on a gas pedal
- 2. Slowly lift your entire leg off the table while trying to keep your knee straight (Try to keep your hip in contact with the ground)
- 3. Hold for 5 seconds before slowly returning your leg to the starting position



EXERCISE MODIFICATIONS

HIP REPLACEMENT: Please check with your surgeon before performing this particular exercise – You may need to limit your motion based on your surgeon's guidelines



WALL SQUATS



Wall squats are a great exercise to build strength and endurance in all the hip muscles. Keeping your low back and shoulders against the wall helps to maintain good alignment during this exercise. Be sure to have a chair, counter, or railing for balance when attempting this exercise. **An exercise ball can be added for an ADVANCED EXERCISE**



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SIMPLE

ADVANCED

- 1. Start with your feet about shoulder-width apart and approximately 18 inches form the wall.
- 2. Slowly bend your knees and slide your back down the wall until your knees are at a comfortable bend
- 3. Be sure to keep your back and shoulders against the wall
- 4. Try to hold the end position for 5 seconds before slowly returning to the starting position (slide back up the wall) During the last repetition, you can time yourself to see how long you can hold the "seated" position before having to return to the starting position



EXERCISE MODIFICATIONS

HIP REPLACEMENT: Please check with your surgeon before performing this particular exercise – You may need to limit your motion based on your surgeon's guidelines



BRIDGES

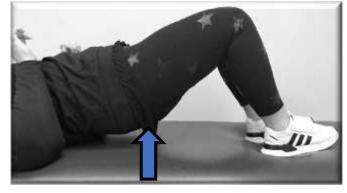


Bridge exercises work all the hip muscles at the same time. The goal is to slowly contract the muscles to slowly raise and lower your buttocks from the ground. To perform this exercise, we recommend lying on your back on a firm comfortable surface. ADVANCED BRIDGES can be attempted while squeezing a small ball or pillow between your knees during this exercise.

- 1. Both knees should be comfortably bent with your feet on the floor and about shoulder-width apart
- 2. With your hands at your sides, slowly lift your bottom off the floor by tightening your leg and stomach muscles
- 3. Keep lifting as high as you can until your **stomach is in line with your knees**
- 4. Try to hold for **5 seconds** before slowly returning to the starting position



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EXERCISE MODIFICATIONS

HIP REPLACEMENT: Please check with your surgeon before performing this particular exercise – You may need to limit your motion based on your surgeon's guidelines



Cool Down

Remember to take some time to cool down and drink plenty of water. Ice and elevation are good habits for any sore joints. This guide can be completed in its entirety or you can pick and choose exercises that work better for you. Ultimately, prevention is the best way to go, we recommend trying to incorporate some of these stretches and/or exercises into a weekly workout routine. Be sure to modify the exercises to work around your respective joint replacement(s).

This guide serves as a self-directed set of exercises. If there is ever any worsening pain, new onset numbness/tingling, or no improvements in your symptoms within 3-4 weeks, we encourage you to seek the guidance of your physician.



