# Flexibility, Core Activation and Stability Building for Osteitis Pubis

- 1. Flexibility and stretching: hold each stretch for 20-30 seconds
  - o Hamstrings seated on floor, straight leg "v", bend at waist, reach for ankles one side at a time



Adductors – seated on floor, feet together, press knees to floor, bend forward at waist
 -AND- seated, straight leg "v", bend forward at waist





o Glutes/Piriformis – seated, ankle on opposite knee, pull up (piriformis), push down (glutes)



- Hip flexors Kneel on one knee with the other foot in front, forming a 90-degree angle. Shift your weight forward slightly to stretch the hip flexors.
  - -OR- supine on foam roller, pull one knee to chest, other leg straight





Thoracic extensions - Place the foam roller under your upper back. Keep your knees bent and feet flat on the ground. Place your hands behind your head, extended out to your sides or extended above your head. Let your head fall to the floor and try to wrap yourself around the foam roller, extending the upper back over the roller. Hold for 10-20 sec. Reposition roller by slowly rolling up or down the spine. Aim for 4-5 positions. Avoid rolling the neck or lower back.





Trunk rotations - Lie on your side with your bottom leg straight and your top leg bent and on the floor. Both hands are placed together in front of your chest. Keeping the bottom arm on the floor, roll back and have your top arm reach back to touch the floor, opening up your chest. Hold the position for 10 sec. Return to start. Repeat 5 times each side.



# 2. Core & Pelvic Floor Activation Exercises:

- <u>Pelvic floor contractions</u> Contract your pelvic floor muscles by imagining you are stopping the flow of urine or preventing gas from escaping. Squeeze and lift these muscles, hold for a few seconds, then release. Repeat this several times, gradually increasing the hold time and the number of repetitions. Be sure to relax fully between contractions and avoid tightening other muscles like your stomach, thighs, or buttocks.
- Transverse abdominis activation Lie on your back with your knees bent and feet flat on the floor. Gently draw your belly button toward your spine, engaging your deep abdominal muscles without lifting your ribcage. Hold the contraction for 5–10 seconds while breathing normally. Relax and repeat for 10–15 repetitions, 2–3 times daily.
- Pelvic tilts Lie on your back with knees bent and feet on the floor. Draw your bellybutton in towards your spine. Think about tipping your pelvis back so your low back flattens into the floor. Then think about tipping your pelvis forwards so your low back arches away from the floor. Do 10–15 repetitions, 2-3 times daily. Feel free to combine the pelvic tilts with the trans abdo activation.





Alternate leg extensions - Lie on your back with knees bent and feet on the floor. Draw your bellybutton in towards your spine. Think about tipping your pelvis back so your low back flattens into the floor. Maintain this position throughout. Slowly slide one heel out until your knee is fully extended. Then slide it back to starting position. Repeat with your other heel. Do 10–15 repetitions, 2-3 times daily. To challenge yourself even further, lift both heels off the ground at the start. Perform alternating leg extensions without either heel touching the ground between reps. Do not progress to the more challenging options if you are unable to maintain your initial core activation and pelvic tilt positions. Always perform in a slow and controlled manner!



## 3. Low-Impact Cardiovascular Exercise

 Introduce a stationary bike for low-impact cardiovascular exercise. Begin with 10-15 minutes and gradually increase duration, promoting blood flow without exacerbating symptoms.

# **Grades of Osteitis Pubis:**

Before diving into the rehabilitation program, it's important to understand the grading of osteitis pubis, which indicates the severity of the condition (https://equilibriumsas.com.au/osteitis-pubis/)

Grade	Side of Pain	Site of Pain	Characteristics of Pain
1	Unilateral, dominant	Inguinal, with radiation to adductors	Pain alleviation after warm-up, pain exacerbation after training
2	Bilateral	Inguinal and adductors	Pain exacerbation after training
3	Bilateral	Groin, adductor region, suprapubic, abdominal	During training, kicking, sprinting, turning. Cannot achieve training goals, forced to withdraw
4	Generalized	Generalized, radiation to lumbar region	Walking, getting up, straining at stool, simple activities of daily living

https://pmc.ncbi.nlm.nih.gov/articles/PMC6307487/

## **Causes of Osteitis Pubis**

Osteitis pubis arises from various causes, ranging from mechanical stress to infections, and is influenced by several risk factors. Understanding these underlying causes and contributing elements is crucial for accurate diagnosis, prevention, and management.

## **Overuse and Repetitive Stress**

One of the primary causes of osteitis pubis is overuse and repetitive stress on the pubic symphysis. Activities that involve frequent or intense use of the pelvic region—such as running, kicking, or jumping—can place excessive strain on the joint and surrounding tissues. This repeated stress leads to inflammation and microtrauma, disrupting the joint's ability to function effectively. Athletes, particularly those involved in high-impact sports like soccer, rugby, and long-distance running, are especially prone to developing osteitis pubis due to the repetitive load placed on the pelvis.

#### **Muscle Imbalances and Poor Posture**

Muscle imbalances or weaknesses in the pelvic and core musculature can contribute to abnormal forces on the pubic symphysis. For instance, tight hip flexors, weak abdominal muscles, or overactive adductor muscles can lead to uneven stress distribution across the pelvis, increasing the risk of inflammation. Similarly, poor posture—such as excessive pelvic tilt, thoracic kyphosis or lumbar lordosis—can alter the biomechanics of the pelvis, creating additional strain on the pubic symphysis during everyday movements or physical activities.

# Treatment Approaches for Osteitis Pubis: Emphasis on Osteopathy

# **Rest and Activity Modification**

- **Rest:** Resting the affected area is critical to allow inflammation to subside. Patients should avoid activities that exacerbate pain, such as running, kicking, or heavy lifting.
- Ice: Apply ice for 15-20 minutes several times a day aids in reducing inflammation and managing pain.
- Activity Modification: Low-impact exercises like swimming or cycling can maintain fitness without stressing
  the pubic symphysis. Gradual reintroduction of activities is essential as symptoms improve.

## **Pain Management: Medications and Injections**

- **Medications:** Nonsteroidal anti-inflammatory drugs (NSAIDs) are commonly prescribed to reduce inflammation and alleviate pain. Speak to your GP or pharmacist to discuss appropriate options.
- Corticosteroid Injections: In severe cases, localized injections may be used to manage persistent
  inflammation and provide temporary relief. Speak to your GP to discuss this option in more detail.

## **Physical Therapy and Rehabilitation Exercises**

- **Strengthening:** Exercises targeting the core muscles, including the transverse abdominis and pelvic stabilizers, are crucial for restoring stability and function.
- **Flexibility:** Stretching tight muscle groups, such as the adductors and hip flexors, helps reduce tension on the pubic symphysis.
- **Progressive Rehabilitation:** Gradual progression in intensity ensures the pelvic region adapts safely to increased demands.

# **Osteopathic Interventions for Pelvic Alignment**

Osteopathy offers a holistic approach to treating osteitis pubis by focusing on the structural and functional relationships within the body. Key osteopathic techniques include:

- **Joint Mobilization:** Gentle mobilization of the pubic symphysis and adjacent joints restores optimal movement and alignment.
- **Myofascial Release:** Targeted techniques relieve tension in the soft tissues surrounding the pelvis, reducing strain on the pubic symphysis.
- **Pelvic Balancing:** Addressing imbalances in the pelvic girdle, sacroiliac joint, and lumbar spine helps normalize force distribution and relieve stress on the pubic joint.
- **Postural Assessment and Correction:** Osteopaths analyse and correct postural deviations that contribute to excessive pelvic strain.
- **Whole-Body Approach:** Osteopathy considers the entire kinetic chain, addressing compensatory patterns in the legs, spine, and upper body that may exacerbate symptoms.