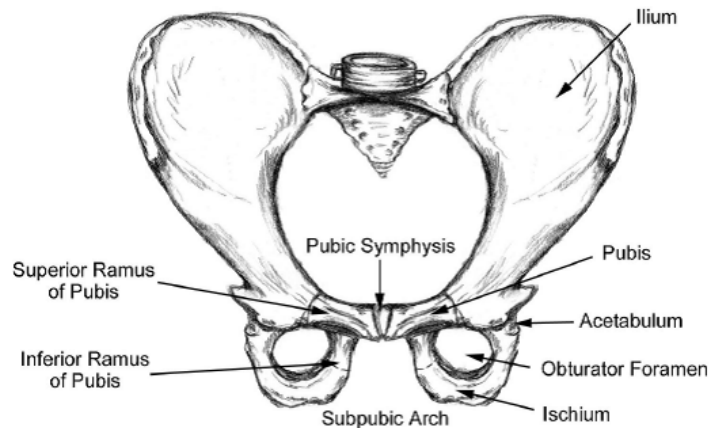


# Pubic Symphysis Dysfunction

The Pubic Symphysis (PS) is a joint formed between the pelvic bones at the front of the pelvis, connected by a small fibrocartilaginous disc. Along with the sacro-iliac joints at the back of the pelvis, this joint helps to keep the pelvis steady and absorb shock during activity. The pubic bones are also connected by 4 ligaments and these help to neutralise any shearing forces. Attached to this joint are the adductor (groin) muscles and the abdominal muscles.

Pubic Symphysis Dysfunction is a common and very painful condition which can affect both men and women. It can occur as a result of a sports injury but is common during or after pregnancy. Dysfunction occurs when the joint becomes too lax, causing excessive movement leading to pain.



Allen K.L. et al., Physical Medicine and Rehabilitation for Osteitis Pubis, <http://emedicine.medscape.com/article/308384-overview>, (accessed 22 June 2010).

## Causes of pubic symphysis dysfunction

- Pregnancy – Relaxin and Progesterone are released, softening ligaments to prepare for childbirth, resulting in increased joint mobility. This is generally worse in the last trimester of pregnancy and can be exacerbated if performing strenuous activities during pregnancy, with increased maternal age, after several pregnancies or with a history of difficult deliveries.
- Biomechanical issues – Hypermobility in general, excessive weight gain, poor posture, muscle weakness
- Anatomic/genetic variations
- Sports injury – such as landing hard on one leg, excessive breaststroke, if the legs are stretched far apart (eg. slipping whilst going for a soccer tackle), associated with a groin strain,

## Signs & symptoms

The severity of symptoms may range from mild discomfort to severe debilitating pain. Symptoms include:

- Pain located in the joint which can be a deep ache, burning, shooting or stabbing. It can be constant or intermittent and pain may radiate into the lower back, abdomen, groin, perineum &/or thighs.
- Pain relief when resting.
- If related to pregnancy the pain can often disappear in the short term after giving birth.
- Increased pain when loading the joint, particularly in single leg positions.

Your Physiotherapist will be able to make a diagnosis after performing an assessment of your pelvic functional movement and the stability/strength of the joint and pelvic muscles.

### **Aggravating factors**

- Excessive single leg loading
- Lifting heavy loads, especially in a squat position
- Twisting/bending whilst lifting
- Pushing heavy objects (eg. shopping trolley)
- Carrying heavier loads on one side (eg. a child on one hip)
- Crossing your legs whilst sitting or on the floor
- Standing or sitting in one position for long periods of time

### **Management**

Initial treatment for pubic symphysis dysfunction will involve activity modification to bring loads on the joint back to a level at which the muscles can cope better. This can be complimented with use of a belt or brace to assist in stabilising the joint. This is generally done in combination with medication for pain relief as well as anti-inflammatory medication where appropriate.

Your physiotherapist will diagnose potentially weak or underactive stabilising muscles and provide you with exercises to improve strength and control of the dynamic stability system of the pelvis. This may involve use of real time ultrasound to assess pelvic floor and deep abdominal muscle recruitment. Often water-based exercises to load the muscles while taking some of the pressure of the joint can be helpful.

If pregnancy related, symptoms should settle after giving birth, especially if being managed by a Physiotherapist. If related to other factors, such as sports injuries, symptoms should fully settle with a course of treatment, avoiding aggravating activities and being compliant with rehabilitation exercises.

**Article by Danielle Smith**