

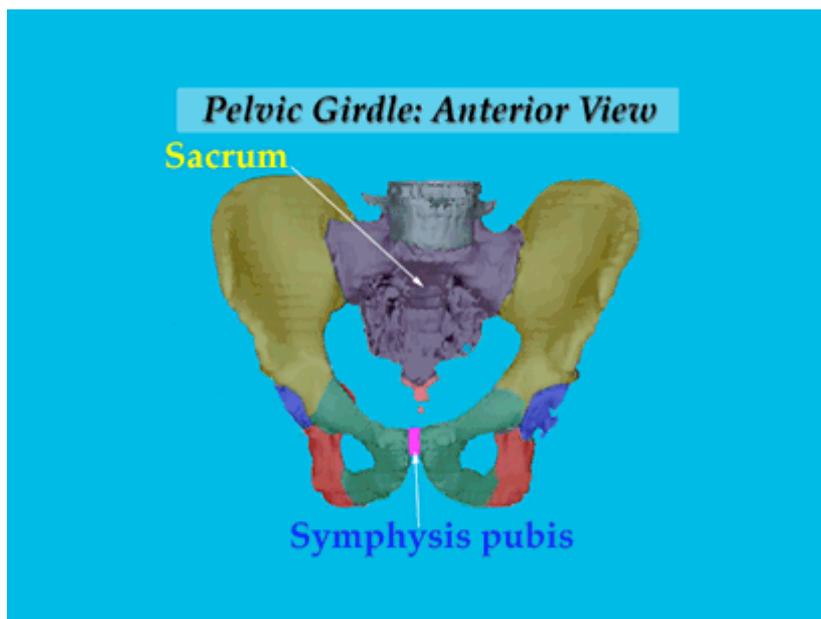
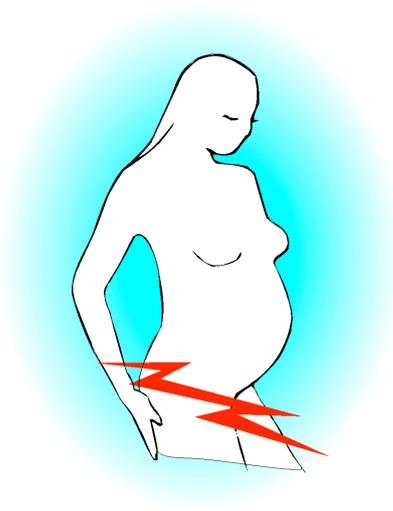
Symphysis Pubis Dysfunction (SPD) now known as Pelvic Girdle Pain (PGP)

Anatomy of the Pelvis - What is SPD/PGP?

The pelvis is a circular structure made up of three large bones: the sacrum (base of the spine) and the two large ilium (hip bones). These two bones are joined together at the front by cartilage and reinforcing ligaments which make up the symphysis pubis joint. At the back of the pelvis the hip bones attach to the sacrum at the sacro-iliac joints.

A small amount of movement at the symphysis pubis is normal, but during pregnancy the hormones relaxin and progesterone soften and stretch the ligaments of the pelvis to provide the flexibility needed for giving birth. These hormones exacerbate a pelvis which may already be unstable from hyper-mobility (double jointedness), Ehlers Danlos Syndrome or from a previous accident or fall. This will affect all the pelvic joints as well as all other joints throughout the body.

In some women the symphysis pubis may become unstable, causing too much movement in the pelvis. Because of the interconnected nature of the pelvic bones, instability at the symphysis pubis often also affects the sacro-iliac joints and vice versa. Abnormal functioning of the pelvic joints is called Symphysis Pubis Dysfunction (SPD) or Pelvic Instability. Some medical professionals consider that pregnancy hormones influence SPD/PGP, but this has not been definitely proven.



Symptoms

Symptoms may occur during pregnancy (sometimes even earlier as the twelfth week) and/or postnatally, and can range from mild discomfort to extreme debilitation. The symptoms of SPD/PGP should not be confused with the usual pelvic discomfort that many/most women experience especially in late pregnancy.

Common symptoms are:

- 1) Pain at the symphysis pubis joint, which can be extremely painful to the touch
- 2) Pain in the groin and lower abdomen which may radiate down the thighs
- 3) Pain and difficulty parting the legs

- 4) Difficulty and pain on walking, rolling over in bed, climbing stairs, getting in and out of cars, driving, sitting down or getting up, putting on clothes, bending, lifting (especially heavy objects) etc.
- 5) Pain in the lower back, especially around the sacro-iliac joints
- 6) Sciatica, i.e. pain in the buttocks which may radiate down the backs of the legs
- 7) Clicking noise may be heard or felt when walking
- 8) Difficulty starting to walk after sitting or sleeping. The hip may feel out of place or that it has to 'pop' into place before walking is possible
- 9) Unusual gait - 'Penguin' walk
- 10) Temporary bladder dysfunction may occur when changing position (e.g. from lying down to standing or leaning forward)
- 11) Knee pain or pain in other areas may be a side-effect of pelvic problems, especially where the problem is long-term and muscle wasting occurs

Causes of SPD/PGP

More recently research in the U.K. indicates that approximately one in 36 pregnant women suffer from some level of SPD/PGP (Ref 1). Many cases are mild and resolve quickly after the baby's birth. Some ethnic groups report a higher incidence, especially Scandinavian women, but this may be due to better reporting of the condition and their tendency towards more 'high-tech' births.

Theories about the possible causes of SPD/PGP include:

- 1) Misalignment of the pelvic bones: the bones don't line up correctly in the front (at the symphysis pubis) resulting in additional pressure on the symphysis pubis cartilage. This misalignment tends also to affect the back, especially in the sacro-iliac area, due to the interconnected nature of the pelvic bones. Misalignment at one or both sacroiliac joints places pressure on the symphysis pubic joint.
- 2) Evidence suggests that pelvic misalignment following birth is often associated with babies who present with the occiput posterior.

This is when the baby's occipital bone at the back of the skull is posterior.

The baby is head down but facing towards the symphysis pubis. This can increase symphysis pubic bone discomfort and backache in late pregnancy.

A posterior position tends to cause a much more prolonged and painful labour with the baby taking longer to rotate into the anterior before being born.

Make sure that babies in an occipital posterior position are encouraged to turn to an anterior position using Optimal Foetal Positioning (OFP) techniques during the last eight weeks of pregnancy as explained in the SPD/PGP publication on Pregnancy and Giving Birth

- 3) Some interventions and positions used during labour and birth are considered to place stress on the symphysis pubis joint:

Positions to avoid

- a) Giving birth on your back with legs in stirrups or on attendant's hips or shoulders
- b) Semi-sitting; this tends to force the baby's head against the symphysis pubis
- c) Second stage positions where the knees are pulled back towards the chest. (see our document about Positions in Labour and Birth)

Interventions

- a) Avoid unnecessary inductions for non medical or obstetrical reasons
 - b) The use of forceps or vacuum extractor may cause extra trauma to the pelvis
 - c) Epidurals deaden the pain, making it difficult to tell if unnecessary strain or further damage is occurring
- 4) Some women may experience hyper-mobility in all their joints due to genetic factors. The relaxing hormones of pregnancy may worsen this condition, leading to pelvic instability.
 - 5) Previous trauma or accidents involving damage to the pelvic area may increase the risk of developing SPD

- 6) Different theories have suggested that the pregnancy hormones relaxin and progesterone may occur at higher levels in some women, causing excessive relaxation of the pelvic ligaments. Another theory is that some women manufacture excessive levels of relaxin during pregnancy, causing pelvic laxity. However, although still popular, this theory seems to have been disproven by recent research

- 7) Diastasis Symphysis Pubis (DSP). This condition occurs when there is a widening of the gap between the pelvic bones at the symphysis pubis. In pregnancy, the gap widens by 2.3 mm to allow for birth, but post-partum the supporting ligaments tighten to reduce the gap to 1 cm or less. Where excessive strain, mishandling or damage has occurred, the pubic symphysis can become abnormally separated causing severe pain postpartum. An abnormal postpartum gap is defined as 1 cm or more after the time when the joint should be back to normal (DSP). The natural extra widening returns to normal after a few days but the supporting ligaments will take 3-5 months to return to their fully functioning state.

Diagnosis of SPD

The best diagnosis is your own symptoms. X-rays, MRI scans or ultrasound may determine whether there is an abnormal gap or misalignment at the symphysis pubis, but this is not always a reliable indicator of the pain experienced by individual women. Some may have relatively normal-looking x-rays, yet suffer a great deal of pain and debilitation. See SYMPTOMS.

Effects of SPD

Even mild symptoms of SPD can create difficulties with the most basic of day-to-day activities, especially when walking is painful. In some cases, walking aids such as crutches, a walking frame or a wheelchair may be necessary.

Women experiencing SPD often have difficulty looking after themselves (getting in and out of bed, bathing, dressing etc.) and will need help with managing their household tasks and any children they may already have. This can put a strain on relationships as partners, family and friends learn to deal supportively with the woman experiencing SPD/PGP and her family's change in circumstances.

As well as the physical limitations, the condition can have significant psychological effects. A woman with SPD/PGP can feel isolated and lonely, especially if she is housebound, and may feel resentful or guilty about her condition. It is often difficult for her to come to terms with the fact that she cannot cope alone when others around her are enjoying the positive experiences of pregnancy and having a new baby. Not knowing how long the problem is going to take to resolve is very difficult.

Many women feel betrayed by their own bodies and experience a sense of failure about their mothering ability. Added to this may be the temporary difficulty or impossibility of maintaining a sexual relationship with her partner, leading to further feelings of inadequacy and failure.

It is extremely important that everyone involved in caring for a woman with SPD/PGP is made aware of the limitations of her condition so that practical and emotional support can be given.

Taking care of yourself

General tips for symptomatic relief:

- 1) Use a pillow or cushion between your knees when sleeping
- 2) Use a pillow under your tummy (in pregnancy) when sleeping
- 3) Keep your legs close together and parallel when moving, turning over in bed, getting in and out of cars etc.
- 4) Satin sheets or nightwear may make it easier to turn over in bed
- 5) When standing, stand with weight evenly distributed through both legs
- 6) Move slowly and without sudden movements – taking extra care not to slip or trip up
- 7) Sit down to put on underwear, socks and pants
- 8) Avoid "straddle" movements
- 9) Avoid heavy lifting, twisting movements and any other movements you know will hurt you e.g. vacuuming can often be a problem
- 10) Icepacks over the painful joint may reduce inflammation. Use painkillers as necessary, in moderation

- 11) Stretching the hamstrings can be helpful for sciatica. Use a stirrup (long piece of rope or a belt) around your foot to reduce the strain on your back. Stretch hamstrings gradually
- 12) Use some kind of pelvic support. Some women find that maternity belts work well, but if your pelvic bones are misaligned this can increase the pain. Supports with a little more 'give' e.g. an elasticised sacro-iliac support belt or similar may be more helpful (See also TREATMENTS)
- 13) If sex is uncomfortable for you, try different positions e.g. lying on your side with your back to your partner and a cushion between your knees
- 14) Back pain can be helped by gentle massage, pelvic rocks or resting backwards (carefully!) over a Swiss ball
- 15) Swimming (not breaststroke) or walking in water can be helpful for some women. Others may find that the water's resistance puts too much stress on their joints. Do what works for you.
- 16) In severe cases, use a walking frame, crutches or a wheelchair. Your doctor can provide you with an application for a disabled parking card if necessary.
- 17) Rest can be extremely helpful. However, it is best to keep as active as possible within the limits of your pain. Sometimes, gentle walking can reduce pain, but always take care not to overdo it. Listen to your body
- 18) Ask for help. Friends and family are often your best resources. Talk to your doctor or medical professional about the possibility of organising home help

Treatments

Due to the relatively small numbers of women experiencing severe or long-term SPD in New Zealand, it is not uncommon to find that many medical professionals have little or no experience in dealing with the problem.

It is advisable to find a treatment provider who fully understands your condition or who has experience in treating SPD/PGP.

- 1) Osteopathy – This is the best and gentlest way of realigning the pelvic bones. Combining osteopathic treatment with core muscle stabilisation exercises for a better, long-lasting result
- 2) Ortho-bionomy, Bowen therapy, Shiatsu and the Alexander Technique may all be useful.
- 3) Physiotherapy – Find a physiotherapist who is experienced in teaching core muscle stabilisation exercises i.e. the Transversus Abdominus, Pelvic Floor, Multifidus and Diaphragm. Working together, these muscles form a corset around the lower spine and pelvis, forming a flexible cylinder of support.

See the internet site www.diannalee.ca under 'Post-partum health for Moms' for more information.

A physiotherapist can also advise you on support belts. These generally need to be paid for.

- 4) General Practitioner. Your doctor can discuss pain management options, the possibility of home help and disability car passes, and put you in touch with any relevant specialists (e.g. orthopaedic surgeons)
- 5) Acupuncture – Can significantly reduce pain levels (2)
- 6) Support belt and orthotics – Support belts offer support and firm pressure on the pelvis which many women find helpful e.g. Sacro-iliac or Maternity Belts. However, if your pelvis is misaligned, a firm belt may worsen the pain (see osteopathy above). For chronic misalignment problems, a flexible, elasticised support is usually more comfortable and effective.

In long-term cases of SPD/PGP muscle wasting can occur, affecting other weight-bearing joints such as the knees. Practitioners should be able to prescribe suitable exercises suited to you that will help you maintain body integrity.

- 7) Surgery – In extreme cases, surgery may be considered an option. This involves procedures to fuse, wire or plate the Symphysis Pubis together. However, this operation is not common and does not appear to have a very very low success rate in terms of pain reduction. See Delphi forums (www.delphiforums.com - put 'SPD' in the search box) for discussions on surgery options
- 8) Counseling - Having someone to talk to. Talking to other women experiencing SPD can be extremely helpful and will reduce any sense of isolation or the feeling that you are the only one dealing with this distressing condition. On the internet, see Delphi Forums (address above) for discussions and contact with other sufferers worldwide. **N.B. The discussions on this forum are the personal views of women and should not be taken as medical advice.**

Prognosis in four syndromes of pregnancy-related pelvic pain.

Researchers divided pregnant women, according to symptoms, into five subgroups.

Four classification groups:

1. Pelvic girdle syndrome (pain in all three joints namely both sacroiliac and symphysis),
2. symphysiolysis (pain only in the symphysis),
3. one-sided sacroiliac syndrome
4. double-sided sacroiliac syndrome
5. one miscellaneous group.

62.5% of women in the four classification groups experienced disappearance of pain within a month after delivery.

Two years after parturition 8.6% were still suffering from pelvic joint pain.

None of those suffering from symphysiolysis had pain 6 months after delivery in comparison to the 21 percent of those with pelvic girdle syndrome.

In general there are an excellent postpartum prognosis in three out of four classification groups.

The women with pelvic girdle syndrome (pain in all 3 pelvic joints) had a markedly worse prognosis than the women in the other three classification groups.

High number of positive test and a low mobility index were identified as giving the highest relative risk for long term pain.

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3. **Albert H, Godskesen M, Westergaard J.** Departments of Physiotherapy and Gynecology and Obstetrics, Odense University Hospital, Odense, Denmark.

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