

# POST PREGNANCY- SYMPHYSIS PUBIS DYSFUNCTION AND PAIN MANAGEMENT USING MODIFIED PELVIC BELTS: A REVIEW

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## Abstract

Many women have excruciating pelvic pain and discomfort after pregnancy due to a disorder called Symphysis Pubis Dysfunction (SPD). This article investigates the usefulness of pelvic belts in the treatment of SPD. The article describes the serious effects this disease had on the patient's everyday life and mobility, highlighting the urgent need for appropriate treatment. The patient's SPD was treated using non-pharmaceutical strategies, including the use of a pelvic belt. The pelvic belt is used to alleviate symptoms and improve the patient's quality of life; this study assesses the patient's progress while using the belt. This case study demonstrates the potential utility of this non-invasive, cost-effective therapeutic technique as an alternate to pharmaceutical therapies. This article is a great resource for learning how to deal with SPD after pregnancy and how pelvic belts can make a huge difference in improving quality of life. The study highlights the significance of a multidisciplinary approach to addressing the issues of SPD and the possible benefits of pelvic belts. More studies and clinical trials are needed to determine whether pelvic belts are effective in the long-term management of SPD and the enhancement of affected individuals' quality of life.

**Keywords:** Symphysis Pubis Dysfunction, pregnancy, pelvic belts, clinical trails.

## Introduction:

Many pregnant and postpartum women experience discomfort from Symphysis Pubis Dysfunction (SPD). The pubic symphysis, or the joint where the two pubic bones connect, is at the front of the pelvis and is frequently the source of pain for those suffering from this condition. SPD is a condition that can occur during pregnancy, but it is more common for symptoms to linger or worsen after delivery. A woman's body goes through dramatic transformations throughout pregnancy (1). Hormones like relaxin loosen up the pelvic

ligaments, making the pelvic joints more mobile during labor. However, the pubic symphysis may become unstable and painful as a result of this hormonal transition. Many women continue to experience pain long after having birth. Pain in the pubic region and lower back is commonly emphasized by women who have SPD after pregnancy. Even turning over in bed or taking a few steps might become an agonizing ordeal. Understanding and treating SPD is vital because it can have far-reaching effects on a woman's mental and emotional health in addition to its obvious physical consequences. Some women have modest discomfort while others struggle

# RESEARCH

O&G Forum 2024; 34 – 3s: 957-965

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with severe pain that significantly alters their everyday life as a result of SPD after pregnancy. Recognizing and treating this problem early is crucial in assisting women in regaining mobility, decreasing discomfort, and improving their quality of life. It is crucial to have an in-depth knowledge of the nuances of SPD after pregnancy. It is crucial to examine this illness in depth and discover appropriate solutions for women who suffer from it, as it is unique to pregnant women due to the physiological changes they experience and the challenges of navigating motherhood while dealing with pain (2-4).

## Postpartum Symphysis Pubis Dysfunction: Risk Factors and Causes

Pregnancy and childbirth are not the only times a woman may experience SPD. It is crucial for effective care and assistance to have an understanding of the causes and risk factors related with SPD in the postpartum period. The following is an analysis of the factors that can lead to SPD: It is likely that more than one factor contributes to the development of Symphysis Pubis Dysfunction (SPD). Better management and treatment of the illness are possible once the underlying reasons are understood. The symphysis pubis, a joint in the front of the pelvis, is often affected by SPD, which can have both internal and external causes. The root causes of SPD are investigated in depth below (5-9):

1. Increased synthesis of relaxin, a hormone that relaxes ligaments and softens connective tissues, is one example of the many hormonal changes that occur in the body during pregnancy. This hormone change is necessary for labor and birth because it permits the pelvis to enlarge, but it also causes joint instability. The pelvic support provided by the ligaments around the symphysis pubis weakens.
2. The growing fetus places a great deal of mechanical stress on the pelvis during pregnancy. The symphysis pubis may experience stress as the pregnancy continues due to the extra weight being placed on the pelvic and lower back. Overuse can cause inflammation and pain in the joint.
3. Subluxation/misalignment of the pelvic bones is a common cause of pain and dysfunction.

One of the risk factors for symphysis pubis dysfunction (SPD) is a misaligned joint. Possible causes of this misalignment include structural abnormalities present at birth or a traumatic injury to the pelvic region.

4. Stress on the pelvis is raised when one's posture is less than ideal, which is especially true during pregnancy when one's center of gravity shifts. The tension on the pelvic area is increased when a pregnant lady adopts a slouched position.
5. Inadequate or unbalanced use of the pelvic floor and other pelvic region muscles might contribute to the onset of SPD. The symphysis pubis is at risk of injury if the muscles that support and stabilize the pelvis are weak or dysfunctional.
6. Injury or damage to the pelvis increases the risk of SPD during and after pregnancy because it weakens the ligaments, cartilage, and bone structures in that area.
7. Some people have a higher-than-average range of motion in their joints because of a condition known as hypermobility. The symphysis pubis may be particularly susceptible to instability and SPD because of the natural laxity of the joint.
8. Excessive weight gain during pregnancy has been linked to SPD because of the added stress it places on the pelvic joints. The mechanical pressure on the pelvis is increased, which can contribute to pain if it's already sensitive.
9. Activities that exert repeated stress on the pelvis, including heavy lifting or a sedentary lifestyle, have been linked to the development of SPD. It's crucial to remember that SPD can develop or remain in the years following giving birth, as its causes are not restricted to pregnancy. Physical therapy, exercises, pain management, and behavioral changes are common components of care and treatment plans for this illness. A thorough evaluation is necessary for individualized treatment approaches because to the heterogeneity in the causes of SPD.

## Etiology

The severity of the symptoms associated with SPD, a disorder that primarily affects the pelvic area, can vary widely. The key to successful

management is a thorough understanding of these symptoms and a precise diagnosis. In this article, we'll go over some of the most typical SPD symptoms and how the disorder is diagnosed through clinical evaluations (10-12):

Typical signs of SPD include:

1. Pain in the pelvic region is the primary symptom of SPD. This discomfort is typically described as a dull ache that occasionally becomes intense or stabbing. Most people report feeling it towards the front of their pelvic, around their symphysis pubis. Pain in the lower back, groin, inner thighs, and lower back are all possible.

2. Pain that gets worse as you move: The pain usually gets worse when you do things like walk, climb stairs, or separate your legs. The pain is typically made worse by actions that put pressure on the symphysis pubis joint.

3. Women with SPD may have trouble with weight-bearing tasks, such as walking or standing for long periods of time. As a result, simple motions like standing on one leg, turning over in bed, or getting into and out of a car may become excruciating.

4. Activity-Related Pain: Some women report feeling more pain when they lift, bend, or even roll over in bed. This has the potential to diminish one's standard of living and way of life.

5. Some people with SPD have said they have heard or felt a clicking or popping in their pelvic area. This could happen when walking, running, or doing anything else that puts pressure on the symphysis pubis.

6. Sometimes the discomfort will travel down the inside of the legs and thighs. Referred pain from the pelvis can feel like sciatica but actually originates there.

7. Because of the pain and difficulty in moving around, people with SPD may walk with a limp or altered stride.

### **The SPD Diagnosis:**

A thorough evaluation by a medical professional is usually required to diagnose SPD. The hallmarks of an SPD diagnosis are as follows (13):

1. First, medical professionals including obstetrics& gynecology and physiotherapist will do a physical examination to determine the patient's current health status. A thorough medical history

will be taken, questions will be asked concerning the origin and severity of the pain, and a pelvic examination will be performed.

2. The physical examination will consist of tests designed to evaluate the health of the pelvic joints. Applying pressure to the pelvis, testing pelvic mobility, and looking for signs of instability or pain around the symphysis pubis are all examples of diagnostic procedures.

3. The healthcare professional will take a thorough history of the patient, asking questions about the nature, length, and degree of any pain the patient is experiencing. They will question about the patient's medical history and the kinds of activities that make the pain worse.

4. To rule out other problems and get a fuller picture of the pelvic area, imaging scans may be performed. The symphysis pubis and adjacent structures can be seen with X-rays, MRI, or ultrasound.

5. Evaluation of Motion and Function It is essential to evaluate the patient's ability to move and do basic tasks, such as walking and standing, when diagnosing SPD.

It's crucial to remember that SPD is generally diagnosed on a clinical basis, and that there is currently no gold standard test for the disorder. To make a diagnosis, doctors look at patient symptoms, past medical history, and rule out other possible causes. In order to reduce suffering and boost quality of life, SPD patients need prompt diagnosis and treatment. Physical therapy, pain management, and alterations to the patient's way of life are the mainstays of treatment. Thus, the case studies of SPD are monitored by old rational way like diagnosis, prescriptions, monitoring and established of long-term medications. The all data is collected more from patients and less by pathological investigations.

### **Day to day like issues:**

Mobility and other daily duties, such as childrearing, may be severely hindered by SPD, which is common among women, especially

# RESEARCH

O&G Forum 2024; 34 – 3s: 957-965

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during and after pregnancy. Here's a deep dive into the ways in which SPD might disrupt your daily life (14-16):

## 1. Problems with Mobility:

**Walking:** Issues with discomfort and difficulty walking are possible. Pain and discomfort in the pelvic region are common complaints of women with SPD, and these symptoms can worsen with prolonged standing or walking.

**Stair Climbing:** Stair climbing can be difficult because of the added stress on the pelvic joints. Pain and agony may accompany each stride.

Simple movements, such as turning over in bed, can become excruciatingly painful. Sleep disruption and pain can result from tossing and turning from side to side.

Getting into and out of a car can be a difficult experience. The pain can be made worse by the simple act of spreading one's legs to get into or out of a car seat or to change one's driving position.

## 2. Regular Routine:

Picking things up off the floor, carrying groceries, or lifting a toddler can all cause discomfort and call for a shift in technique.

Routine housework like cleaning, cooking, or doing laundry can get exhausting if you're on your feet and moving around for long periods of time.

Even sitting for a long time might be uncomfortable. This has the potential to disrupt regular office or at-home operations.

## 3. Difficulties with Childcare:

Lifting and carrying a newborn can be physically demanding, especially for new mothers. It hurts when you pick up a baby from the floor, the changing table, or the crib. Sometimes, moms need to try new approaches or get more help.

Squatting or bending over to engage in play with children might be challenging. Limitations on things like floor time, crawling, and playing with older kids could be an issue. The act of pushing a heavy object in front of the body, like in the

case of a stroller or pram, might aggravate preexisting pelvic pain.

## 4. Self-Care:

Basic self-care tasks like showering, dressing, and putting on shoes can be challenging for those with mobility impairments. These tasks frequently call for a wide range of motions, some of which may be uncomfortable.

In the later stages of pregnancy, when the pelvis is under additional strain, using the restroom might become more difficult.

## 5. Feelings Evoked:

Frustration and stress can result from having to deal with chronic pain and restricted movement. Increased weariness is a common side effect of living with chronic pain and movement restrictions.

## 6. Career and Personal Life:

**Career:** Women experiencing SPD may experience decreased output in the workplace. Workplace adjustments may be necessary if standing, walking, or sitting for extended durations causes discomfort.

Pain and discomfort may make it difficult to take part in social activities. Reduced socializing with loved ones is possible.

It's crucial to keep in mind that SPD might have different effects on different people. There may be a wide range in the severity of symptoms experienced by different women. Reducing the severity of SPD and allowing women to restore mobility and quality of life depends on prompt diagnosis, individualized treatment, and pain management measures. Fortunately, the condition is manageable and the difficulties it causes in daily life, particularly in the postpartum period, can be lessened with the help of physical therapy, support belts, and alterations to one's way of life.

## Drug-Based Therapies:

Non-pharmaceutical approaches are typically used to treat SPD. However, in extreme cases of pain and discomfort, doctors may prescribe some pharmaceutical therapies. Any drug taken during pregnancy or after delivery should be prescribed by a doctor and taken under close

medical supervision, with the risks and benefits carefully considered. Some possible pharmaceutical approaches to treating SPD are listed below (17-19):

#### 1. Drugs to Ease Pain:

Tylenol (acetaminophen): This pain reliever is typically safe to use during pregnancy and may be prescribed. In order to avoid any unwanted side effects, it should be used exactly as prescribed by your doctor.

#### 2. Inflammation-Reducing Drugs:

Generally speaking, NSAIDs like ibuprofen and naproxen should be avoided during pregnancy due to the hazards they pose. However, due to their anti-inflammatory and pain-relieving characteristics, they may be considered after pregnancy. Before taking these, talk to your doctor.

#### 3. Pain Relievers:

In some circumstances, doctors may provide muscle relaxants like Cyclobenzaprine (Flexeril) to help with the pain and tightness in the muscles that come with SPD.

#### 4. Pharmaceutical Opioids:

Pregnancy and the postpartum period are not ideal times to take opioid painkillers like codeine or tramadol because of the heightened risk of addiction and adverse effects. They are only explored when all other therapies have been exhausted and the potential advantages are worth the potential dangers.

The risks and benefits of pharmaceutical therapy for SPD should be carefully weighed by healthcare practitioners before, during, and after pregnancy. When physical therapy, pelvic support belts, and changes in diet and lifestyle have failed to alleviate symptoms, medication may be considered. A healthcare physician may also recommend complementary and alternative treatments like acupuncture or chiropractic adjustments.

Never self-prescribe or use drugs without medical supervision, especially during pregnancy or while breastfeeding; women should always speak with their healthcare

specialists to identify the most suitable and safe strategy to managing SPD symptoms. Management of SPD should prioritize the mother's and child's health and safety.

#### Non-Pharmacological methods:

Treatment for SPD following pregnancy typically begins with non-pharmacological techniques. The goal of these techniques is drug-free pain relief and increased mobility. Some successful alternatives to medication for treating SPD include the following (20-23):

##### 1. Belts for Pelvic Support:

As an extra measure of support, a pelvic support belt or maternity belt is often suggested. These belts are useful because they support the pelvis, ease pressure on the symphysis pubis, and prevent or minimize pain. Professional medical staff may be able to provide advice on choosing and wearing the right belt.

##### 2. Chiropractic care:

Non-drug approaches to SPD treatment center around the use of physical therapy. A physical therapist can help you develop an exercise plan to help you gain strength in your pelvic floor and improve your balance and core stability. Joint mobilizations and soft tissue work are two examples of manual therapy that may be used to alleviate discomfort.

##### 3. Exercises for Pregnancy and After Childbirth:

Postpartum women can benefit from gentle exercises that target the abdominal and pelvic floor muscles. Water aerobics, yoga, and Pilates are all common selections. To avoid injury, working out should only be attempted under the watchful eye of a trained professional.

##### 4. Staying off your feet and getting some shut-eye:

To alleviate pain in the pelvis, rest is essential. Those with SPD should avoid or minimize their participation in activities like prolonged standing, stair climbing, and heavy lifting. Keeping a healthy sitting position can also assist alleviate stress.

##### 5. Alternating Hot and Cold:



# RESEARCH

O&G Forum 2024; 34 – 3s: 957-965

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Pain and swelling can be temporarily alleviated by using heat or cold packs on the afflicted area. Tense muscles can be soothed with heat, and swelling can be reduced with cold compresses.

## 6. Adjusting the Spine:

Some women with SPD may benefit from chiropractic adjustments. A chiropractor who specializes in postpartum treatment may be able to help realign your pelvis with some light manipulation.

## 7. Acupuncture:

The calming effects of acupuncture and the reduction of muscle tension may help alleviate pain. Always talk to your doctor before starting any new therapy, and check that your acupuncturist has expertise working with pregnant and nursing mothers.

## 8. Nutrition and Diet:

Keeping to a balanced diet might help with inflammation and general health. Some people find relief from eating anti-inflammatory foods like the fatty fish that are rich in omega-3 fatty acids.

## 9. Body mechanics and correct posture:

Learning how to stand and move correctly can take a huge load off of your pelvis. A healthcare provider should instruct patients on proper methods of repositioning themselves while lying down, sitting up, standing, and lifting.

## 10. Help for Emotional Distress:

Emotional difficulties are a part of living with SPD. If you're feeling emotionally overwhelmed, it may help to talk to a mental health professional or join a support group for women.

Whether you're pregnant or not, if you're in need of chiropractic care, physical therapy, or obstetric care, it's important to work closely with a healthcare practitioner to create a treatment plan that fits your unique needs and alleviates your symptoms. Non-pharmacological therapies may have varying degrees of success for different people, and it is frequently advised that a variety of techniques be used in tandem for the best outcomes.

## Pelvic belts:

The symphysis pubis joint, located in the pelvis, can benefit from the use of a nonpharmacological device called a pelvic belt, maternity belt, or pelvic support belt. It is widely used to treat the discomfort and lack of movement associated with SPD during and after pregnancy. Women who, due to hormonal and structural changes during pregnancy, endure discomfort and instability in the pelvic region can benefit greatly from wearing this belt (21-24). Thus, the pelvic belts have variable benefits therefore there is no need for pharmacological support thus, no systemic side effects and comes with long term relief.

## The Function of a Pelvic Belts (25-27):

By providing external support, a pelvic belt can ease pressure on the symphysis pubis and other pelvic structures. As a result,

1. The belt secures the pelvic girdle by wrapping over the hips and lower stomach. The symphysis pubis receives less stress from excessive motion or shearing forces because of this.
2. Pregnancy-related uterine growth can cause discomfort in the lower back and pelvic without proper support. The pelvic belt helps to relieve some of the strain on the uterus by providing structural support.
3. The pain associated with SPD can be alleviated with the help of this belt by limiting the motion of the pelvic joints and providing support for the uterus.

## Medical Background:

Pains in the hips, lower back, and genitalia were described as "sharp and shooting."

Patients had trouble getting around, turning over in bed, and going about their regular routine.

These problems were only partially alleviated by non-pharmaceutical treatments they had tried before.

## Method of Treatment:

The patients are given a pregnancy-specific pelvic support belt.

They are shown how to fasten the belt and how to make the necessary adjustments.

Stress on the pelvic region can be alleviated with the help of education on proper posture and body mechanics.

### Results:

After only a few days of wearing the pelvic belt, the patients feel considerably better. They had less trouble getting around town and completing their regular duties. Reduce in pain during the night led to better sleep.

### Discussion:

The symphysis pubis joint was adequately stabilized thanks to the external support supplied by the pelvic belt. The pain and discomfort patient had been feeling were alleviated as a result. The patient was able to go about his everyday life with less difficulty and more mobility thanks to the belt (28-30). The effectiveness of a pelvic belt varies from patient to patient, although it has been shown to be helpful for many women with SPD. Effective use of a pelvic belt requires careful consideration when selecting a model and ensuring a good fit. The use of the belt throughout pregnancy and the postpartum period should also be monitored and guided by a healthcare expert. When it comes to relieving the pain and discomfort of SPD during and after pregnancy, pelvic belts are invaluable aids. They're a safe, non-invasive option that can make a huge difference in a woman's well-being during a difficult time in their life.

### Conclusion:

In sum, postpartum women may experience serious difficulties due to Symphysis Pubis Dysfunction (SPD). In this post, we looked at the use of pelvic belts and other nonpharmacological approaches to treating SPD symptoms. The patient's quality of life and alleviation of symptoms both increased significantly after using the pelvic belt. In light of this, it's clear that non-invasive, low-cost methods of treating SPD should be seriously considered. For women suffering from SPD after giving birth, a pelvic belt offers a promising non-pharmaceutical alternative to traditional treatments. However, more studies and clinical trials are needed to determine the wide-ranging

usefulness and efficacy of pelvic belts for controlling SPD. Despite the promising findings of this case study, the complex nature of SPD necessitates a multidisciplinary approach to management that incorporates physicians, physiotherapists, and tailored care. In conclusion, SPD is a serious issue, and pelvic belts may greatly enhance the quality of life for women who suffer from it. This article emphasizes the significance of enhancing the quality of life for those suffering with SPD in the post-pregnancy era, and thus the need for continuous research and evaluation of non-pharmacological approaches.

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## RESEARCH

O&G Forum 2024; 34 – 3s: 957-965

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