

## There's help for pregnant women and new mothers

### *Pregnancy shouldn't mean pain*

Pregnancy and new motherhood should be times of joy and promise—not pain. Fortunately, times have changed since your mother was pregnant: you don't have to live with pain or other problems related to pregnancy or delivery.

That's because physical therapy has changed, too. It's no longer just for joint problems; it's also a safe, proven, and widely prescribed treatment for pregnant women and new mothers. It promotes a far healthier, less stressful, more comfortable pregnancy that pays lasting dividends: an easier labor, a speedier recovery, and less likelihood of postpartum pain or incontinence (urine leakage).

Physical therapists are trained in the assessment and treatment of problems in the musculoskeletal system. Under the supervision of a physical therapist, an individualized treatment program can be developed to address any identified problems. This treatment program often consists of instructions in relaxation training and breathing exercises for labor and delivery, as well as instructions in back care, body mechanics and infant/child positioning to alleviate lower and upper backaches, as well as a home exercise program to address areas of weakness.

### **Common Ailments Associated with Pregnancy**

#### **Back and joint pain**

Postural and hormonal changes during pregnancy can cause upper and lower back pain and worsen pre-existing joint problems. A pregnant woman may also experience pain in the back of the pelvis above one of the buttocks (sacroiliac dysfunction), in the groin area (pubic symphysis strain), or in the tailbone (coccygodynia)—or perhaps pain, numbness, or tingling in one or both legs (sciatica).

#### **Numbness and tingling**

Tissue swelling during pregnancy can cause tingling or numbness in the arms or legs due to excess pressure on the nerves. Exercise can strengthen muscles, promote circulation, and relieve these sensations. Manual therapy (massage), body repositioning, and joint supports can also help alleviate swelling.

#### **Incontinence and vaginal pain**

Pregnancy can lead to pelvic-floor and abdominal muscle weakness, which can lead to incontinence. Childbirth and episiotomy may trigger vaginal pain that may persist after delivery. Kegel and specialized abdominal exercises can successfully strengthen the pelvic floor muscles to relieve incontinence and vaginal pain. In addition, use of hands-on trigger-point releases, myofascial mobilizations, and scar tissue massage can be very effective in pain reduction.

## Post-cesarean and episiotomy symptoms

To relieve pain and promote healing from cesarean sections, episiotomies, vaginal tears, and hemorrhoids, physical therapy can provide specialized abdominal and postural exercises, postural retraining, scar massage, ultrasound, and exercises to strengthen bowel, bladder, abdominal, and chest muscles weakened by cesarean section.

## Back pain is the number one complaint among pregnant women. What causes this pain?

### Factors increasing the risk of back pain during pregnancy

Key factors that are associated with increased risk of developing low back pain during pregnancy include:

- Physically strenuous activities
- Lifting, bending, and child care
- A history of low back pain or injury prior to pregnancy
- Excessive weight gain (above that recommended by your health care provider)

### Common causes of back pain during pregnancy

The most common cause of back pain in pregnancy is **dysfunction of the sacroiliac joint** (the joints between the sacrum and pelvis bones on either side of the lower back). While it can be quite painful, this condition is treatable and tends to get better after delivery of the baby.

### Types of back pain in pregnancy

#### Common types of back pain during pregnancy

Studies show that low back pain usually occurs between the fifth and seventh month of pregnancy, but can begin as early as eight to twelve weeks into your pregnancy. Women with pre-existing low back problems are at higher risk for back pain, and their symptoms can occur earlier in the pregnancy.

There are two common types of back pain in pregnancy, lumbar pain and posterior pelvic pain.

#### Lumbar (low back) pain during pregnancy

Lumbar pain during pregnancy is generally located at and above the waist in the center of the back. It may or may not be associated with pain that radiates into your leg or foot.

In general, lumbar pain during pregnancy is similar to low back pain experienced by non-pregnant women. This type of pain typically increases with prolonged postures (such as sitting, standing, or repetitive lifting). Tenderness may also be present in the muscles along the spine during pregnancy.

#### Posterior pelvic pain during pregnancy

Posterior pelvic pain (in back of the pelvis) is four times more prevalent than lumbar pain in pregnancy. It is commonly caused by dysfunction of the sacroiliac joint (the joints between the sacrum and pelvis bones on either side of the sacrum). The sacroiliac joint forms the functional unit of the pelvis allowing for the

normal alternating movement during walking. As the pregnancy progresses, hormonal changes prepare the pelvis for delivery of the child by relaxing the ligaments that control the function of these joints. The increased elasticity of these ligaments during pregnancy is essential for the birth canal to expand as the baby passes through it. However, the associated increase in motion and instability of the sacroiliac joint can be a source of pain.

Posterior pelvic pain is a deep pain felt below and to the side at the waistline, and/or below the waistline on either side across from the tailbone. It can extend down into the buttock and upper portion of the back of thighs, and does not usually radiate below the knees. The pain doesn't resolve quickly with rest, and morning stiffness may also be present. This type of pain may be experienced on one or both sides.

Posterior pelvic pain during pregnancy can be brought on or exacerbated by the following activities:

- Rolling in bed
- Climbing stairs
- Sitting and rising from a seated position (such as getting in and out of cars, bathtubs, bed)
- Lifting, twisting, bending forward
- Running and walking

A job that involves prolonged postures at extreme of ranges (such as sitting at a computer and leaning forward, standing and leaning over a desk or workstation) increases the chance of developing posterior pelvic pain during pregnancy.

Unlike many other types of low back pain during pregnancy, a previously high level of fitness does not necessarily prevent this problem. The good news is that posterior pelvic pain can be treated with physical therapy and often resolves after delivery of the baby.

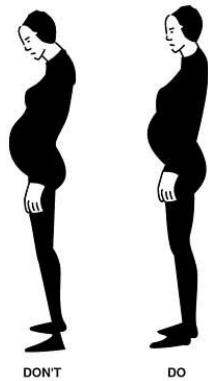
### **Management of back pain in pregnancy**

#### **Conservative treatment for back pain during pregnancy**

Conservative management of back pain in pregnancy generally includes appropriate exercises and use of proper body mechanics. These activities promote and support proper posture, which is essential to avoiding unnecessary stress to the supporting structures.

Often just one or two visits to a physical therapist experienced in pre/post partum treatment can be very helpful to help minimize or alleviate unwanted back pain during pregnancy. If more extensive treatment is required, a physical therapist will perform an individual evaluation and begin a treatment program with you.

The main goal of treatment is to maintain an optimal level of function throughout the pregnancy and to have the least amount of discomfort.



### Treatments to relieve back pain during pregnancy

Typical physical therapy treatments may include:

1. Instruction in proper posture while pregnant
2. Instruction in specific body mechanics for routine activities, such as housework, job, sleeping
3. Instruction in a home exercise program appropriate for your stage of pregnancy
4. Self help techniques for pain management and mobilization during pregnancy
5. Hands-on treatment (manual physical therapy) as determined by evaluation by a physical therapist

Remember, while back pain is fairly common during pregnancy, it should definitely not be accepted as just part of the process. To help make your pregnancy more enjoyable and to facilitate an easier delivery, back pain should always be addressed quickly and managed throughout your pregnancy.



### Exercise for back pain during pregnancy

#### Pregnant women and back pain

Eighty percent of pregnant women will experience back pain at some point. The severity of this pain during pregnancy ranges from mild discomfort (after standing for long periods of time) to unbearable pain that interferes with daily life. Although back pain can be a sign of a more serious condition (including labor), in most cases, it is the result of changes happening within the body.

#### Factors that influence back pain during pregnancy

The structures of the back are left vulnerable due to several factors during pregnancy:

1. *Weight gain*—pregnancy can cause you to gain as much as a quarter of your body weight, adding stress to the back and other weight-bearing structures.
2. *Center of gravity changes during pregnancy*—the weight gained is typically carried in the front . This change in your center of gravity creates:
  - o Muscular imbalances. These imbalances create strain on weight-bearing structures in the body and are more problematic if superimposed on existing imbalances (such as muscle weakness and inflexibility).
  - o Muscles will tend to fatigue more quickly than usual. This muscle fatigue in turn results in poor posture and/or makes poor posture even worse.
3. *Hormonal surges (relaxin and estrogen)*—pregnancy related hormones can cause problems by creating joint laxity, especially in the pelvis. These hormonal surges, along with the additional weight and change in center of gravity, contribute to decreased joint support.

Although it may seem enticing to rest when experiencing pain and not to start an exercise routine, gentle stretching and movement will often decrease muscle tightness and spasms and will improve functioning, resulting in decreased pain. Exercise also boosts energy levels and helps maintain stamina to contribute to an easier labor, delivery and post partum recovery. The components of a balanced exercise program during pregnancy include cardiovascular, strength and flexibility training.

#### **Cardiovascular exercise for back pain during pregnancy**

Cardiovascular exercise is an activity that increases the body's heart rate for a sustained period of time. Walking, biking, and swimming are all considered safe for most pregnant women and can be performed for 20 to 45 minutes, 3 to 5 days a week. Pregnant women should exercise at a mild to moderate level, but not to the point of exhaustion. During pregnancy, unless directed by your doctor, any exercise is better than none. Even a short walk at lunch time is beneficial.

#### **Strengthening exercises for back pain during pregnancy**

Strengthening the abdominal, pelvic floor, buttock, and thigh muscles can effectively help prevent and decrease back pain. It is recommended that the strengthening exercises be performed in a slow and controlled manner. The strengthening poses can be held for 3 to 10 seconds and repeated 10 to 30 times. Breathe out during the exertion phase of the exercise and inhale as you relax. The following are suggested exercises for each of the major muscle groups mentioned:

#### **Stretching exercises for back pain during pregnancy**

Stretching is extremely important for back pain prevention and treatment during pregnancy. To improve flexibility, it is recommended that stretches be performed daily. Holding the stretches (never bounce) for 20 to 30 seconds and repeating 3 times is generally sufficient.

There are many stretches that can safely be performed during pregnancy, however the most effective stretches seem to be the ones that target the back muscles, hamstrings (on the back of the thighs), the quadriceps (on the front of the thigh), and chest and neck muscles.

Due to the host of changes happening within the pregnant body, back pain tends to be a frequent complaint, and exercise is an easy way to achieve relief during this time. It is always important to discuss

any symptoms with your health care provider to ensure exercise is appropriate for you and to be aware of any guidelines or restrictions that may be suggested.