One woman in four experiences pain in her back during labor, usually in the second region but sometimes in her hips or radiating into her thighs. It is important to understand the causes, how to prevent it, and learn additional coping tools as the typical breathing and relaxation techniques may not be enough.

The term "back labor" can mean any variation of the experience:
- Back pain felt primarily during the contraction
- Pain during and between contractions
- Lower back pain that is felt for a portion of labor but not the entire time

**Causes**

There can be several sources of this pain. By far the most common, cause is that the baby is in the "posterior" position in the womb, which means the head is down but facing forward with the back of the head (the occiput) pressing against the sacrum (Mom’s posterior). The medical lingo for this position is "OP" and it can be further described by the addition of the direction, right or left, towards which the occiput is leaning. Thus a baby who is facing mom's right front, and his occiput is leaning against her left sacral region, is called Left Occiput Posterior or "LOP" for short. See figure 1.

Some other reasons that mom may experience back labor include the effects of her anatomy, such as:
- short-waistedness may create an angle that forces the head to enter the pelvis pressing more into the sacrum & causing pressure there; this anatomical variation can create a more dramatic profile, as baby appears to stick out front at a low angle(see figure 2).
- Scoliosis (a side to side curvature of mother's spine
- an exaggerated sway back, again creating an angle that may put more pressure on mother's low back due to the angle the baby's head presents into the pelvis.

Other times there is not a clear explanation why a woman feels her contractions in her back. The same mechanism that is responsible for feeling menstrual cramps in one's back may be another reason some feel contractions in the back.

Since the posterior position fetus is the most common cause of back labor, it's critical to learn what may contribute to this and ways to deal with it. You must also recognize that sometimes a posterior baby will also cause slow or inadequate progress in dilation. In fact, this can be confusing in the cases when the lack of progress during labor may be the ONLY sign of an OP baby without any significant back discomfort. An anterior baby's head will act like a nice rounded wedge to push open the cervix evenly with the force of the uterine contractions. So when the head is in another position, like posterior or asyntotic (at a sideways angle), an uneven edge of the fetal skull is pressing against the cervix. Thus the contractions may be frequent, irregular and brief (not lasting the usual 50-60 seconds) but resulting in little or no dilation.
Some midwives think there may be several factors that influence a fetus to get into the OP position. Even though their theories have not been totally substantiated, it makes sense to make alterations if possible in your lifestyle when doing so would not cause any harm and may help prevent along, hard labor.

Factors that may encourage the OP position:

1. Increase in time women spend sitting, in bucket seats, recliners, at computers, or watching TV.
2. Modern seating - when a pregnant woman sits in a modern chair, sofa or bucket seat her pelvis tips backward, and so does baby. To balance her body, she often crosses her legs, which decreases the amount of space in her anterior pelvis. The baby is thus encouraged to lie toward the back of her pelvis, leading to the OP position.
3. Women no longer perform physically demanding work like our grandmothers did, such as scrubbing floors, working in the fields, etc. Many of these jobs required tilting forward and bending with lots of pelvic rocking movements. These movements may have encouraged the fetus to settle in to the anterior position.
4. Young women are no longer taught "correct posture" like in Victorian times (sitting upright and walking with their shoulders straight).
5. Anterior implantation of the placenta in the uterus may favor an OP fetus.
6. A pregnant mom with tight abdominal muscles has a sharper angle between her lumbar spine & pelvic brim. Ballet dancers, aerobic instructors, equestrians or any other woman who for whatever reason has quite tight tummy muscles are more at risk.

Determination of the OP fetus is often difficult. I suggest each pregnant woman do the following:

♦ Have your provider examine your abdomen thoroughly at each & every visit after 30 weeks as you also learn how to feel your baby’s head, back, and small parts.
♦ Pay attention to baby’s movements, as they are clues to where you baby is facing (i.e. kicks & movements directly in front may indicate OP)
♦ Look at your profile regularly in your last weeks, noting any unusual horizontal angles as well as the shape of your belly. The pressure of the fetal bottom when baby is OA usually pushes the mom's belly button out, even when she lies down on her back. After engagement, her abdomen will often look low slung and bulky. But if her belly button looks saucer shaped, it suggests the space where the baby's limbs are positioned. See drawing to the right. Also, if the abdomen appears high and flat on top and looks tidy & compact, it indicates the head isn't engaged which can mean an OP baby who isn't able to descend easily.
♦ Once in labor, always ask your provider to make an effort with each vaginal exam to determine your baby's position by feeling the soft spots or fontanels. But remember they may not be able to give you that information if your cervix is not open enough, if the bag of waters is in the way, or if their fingers aren't sensitive enough to feel baby's fontanels.

Prevention Strategies

♦ Avoid semi-reclining; with your knees higher than your hips as it reduces the angle of your pelvis. If you need to sit a lot at work, drive or ride for long periods in the car with bucket seats, stop often and move around.
♦ Don't cross your legs if you do sit. Try sitting up straight, legs crossed and slightly open OR use an ergonomic back chair.
♦ When assuming standing positions, lean over counters, chair backs, etc. to encourage baby into the pelvis at the optimum angle.
♦ Begin doing the pelvic rock on all fours in the last month of pregnancy.
♦ When in bed resting or sleeping, make sure you are on your side with support
behind your back and your top leg resting forward so that knee touches the mattress. This keeps the abdomen forward, creating a "hammock" for your baby's back. An extra cushion between the thighs is ok.

♦ Swim laps, using the crawl or breast stroke. This is great for encouraging the fetal back to swing toward the front. The buoyancy feels great and the water pressure may help decrease late pregnancy swelling by forcing the extracellular fluid back into the venous supply.

Tools for Labor
As soon as you suspect a posterior baby (experience any symptoms such as slow progress or any back pain at all) begin working to turn it into an anterior position. The sooner the better because it is more likely to if it is done while the baby is higher in the pelvis versus letting it engage and descend from the pressure of the labor contractions. Keep moving in labor, alternating these activities or positions. Keep in mind that you’ll want to keep the baby from resting on your back which usually increases your discomfort. Remain in an upright or leaning forward posture as much as possible and if you must lie down, lie on the side toward which your baby's back is pointing, i.e. if LOP, lie on your left. But note that your top knee needs to be only slightly flexed, not totally flexed, which can tilt you too far over onto the bed. If you're unsure which side the baby is facing, alternate frequently.

1. **Pelvic Rocking on All Fours (Hands & Knees)** - While on your hands and knees, rock your pelvis forward and back, or in a circle. This allows baby to "hang" down towards the ground due to gravity, dislodging it from deeper in the pelvic bones. The buoyancy factor helps the baby to rotate in the amniotic sac with his/her back moving towards the ground. Some yoga teachers call this the "mad cat" or "rainbow" posture. Remember to tuck the tailbone, feeling the buttocks and abdominals doing the work. Do this for 10 minutes every night the last 3-4 weeks of your pregnancy to increase odds your baby will go ahead and rotate to anterior. Many moms say it feels good, too, relieving backaches common in the last month and getting extra weight off the back for the time. Do this in early labor as well.

2. **Open knee-chest position** - If in early labor you experience the irregular, frequent and brief contractions with little progress mentioned above, try to spend 30-45 minutes in this position. It allows the fetal head to "back out" of the pelvis and reposition favorably. Make sure your buttocks are up high with hips flexed to an angle of 90° or greater. It takes some stamina so you may wish to alternate with side-lying, knee-flexed resting poses. See drawing at right.

3. **Lunge** - Stand with a stable chair beside you. Put one foot on the chair seat with your knee and foot pointing to the back of the chair, while your body remains facing at a right angle to the chair, opening your inner thigh. This
creates openness in that hip and as you lunge in towards the chair with your raised, bent knee, you should notice a good stretch in the insides of the thighs. Stay in the lunge position for a count of at least 5; build to a longer count if possible. Release & return to upright. Slowly repeat the lunging during contractions in rhythm to your slow, easy breathing. The movement should be deliberate, even and persistent. Have someone hold the chair steady if it tends to move during your lunging. If you know which direction your OP baby is facing, i.e. left or right, lunge towards the side where their back is. If he is LOP, lunge left. If you don’t know alternate sides. This helps to open that side of the pelvis, allowing more room for baby to rotate.

4. Birth Dance - a pleasant alternative to walking, pretend you & your partner are dancing except you can just stand in one place. Let your partner hold you up with his arms and let your arms hang loosely over his so you can relax your upper body as you rest your head on his chest or shoulder. Shift your weight from one leg to the other in time with your slow easy breathing or the music you have playing. This helps open the pelvis like walking does. (See right)

5. Birth Ball - If your birth facility has one of these large physical therapy balls, ask for it early, then spend time either sitting on it, gently rocking your pelvis in small circles or leaning forward onto it while it rests on the bed or other high surface.

6. Walking or stair climbing - take advantage of gravity and joint movement of the hips to assist baby's rotation and help align it well into the pelvis.

7. Abdominal lift - this is particularly useful whenever the baby appears to be at an exaggerated angle out in front, as described earlier, if mom is swayback or short waisted or carrying a large baby. Mom can do this or have her partner stand beside her or next to her and perform the lift. Basically, during the contractions, slide the hands under the baby, interlacing the fingers, and gently lift up and inward to change that horizontal angle of the fetal spine into a more vertical one, encouraging fetal descent into the pelvis. You may prefer a folded sheet to act as a sling under baby, with a helper on, each side. During contractions both lift each side of the sling to
pull baby up and in. If mom has extreme discomfort with this, it may not be what she needs. Often times she'll feel relief and tell you it's helping.

**Comfort Measures**

Partners can use any of the following measures to ease mom’s back pain regardless of its causes and in addition to the above. Keep in mind that there are two focuses with back labor – ease the discomfort AND remedy the cause if possible.

1. **Massage** - try using massage oil, lotion or cornstarch and firm stroking or kneading on the low back, buttocks or hips. Mom should tell you how she wants you to do it (if not, ask).

2. **Counterpressure** - stabilize mom's hip with one hand and apply steady pressure with the other in whatever area of the low back she requests. Try using the heel of your hand or your fist. As labor progresses the spot she prefers may move as baby moves down. She may want you to try pressing with your thumbs on either side of the sacral joint, all the way down to the tailbone. Many partners don't realize how low the back pain can be, so always ask for feedback on anything you try.

3. **Heat or Cold** - alternate using either a hot water bottle or ice pack on the low back to block the pain impulses. Remember to place a cloth over the bottle or ice pack to avoid burns or numbing directly on the skin. Substitute a washcloth, a microwaveable item like the rice filled sock or tea towel, if necessary.

4. **Rolling pressure** - in addition to counterpressure, experiment with rolling a hard item such as a tennis ball or trim roller over the area of mom's pain. A cold beverage can is soothing as it has the cold and rolling pressure.

5. **Massagers or vibrators** - hold a vibrator or massage tool against her low back to ease her discomfort.

6. **Double hip squeeze** - while mom is leaning forward, usually kneeling, on hands and knees or straddling a straight back chair, partner stand behind her and press on both sides of her buttocks with the palms of the hands, fingers facing toward her spine. Do this during contractions, applying as much pressure as she needs. It helps to replace the sacral joint ligaments that the baby's head is pressing against on the inside. (see figure 3)

7. **Shower or bath** - water has so many healing, & relaxing benefits. Don't forget to use it! Sometimes the shower directed right on her low back as she stands or sits (birth ball or stool) does wonders. Or, simply submerge into a comfortably warm tub full of water. She can try any position that feels good or is relaxing. If she gets on hands and knees in the tub, partner can use a cup & pour water over her back or place a wet towel over the area to keep it warm as she does pelvic tilts.

8. **Sterile water blocks** - the nurse or midwife can inject 4 tiny papules of sterile water along the sacrum. These sting for a few seconds then reportedly give good pain relief to over 50% of the women who try them. The action is probably related to local endorphin release and may ease discomfort up to several hours.

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In summary, if you have back labor your efforts will be two fold: to eliminate the cause, such as the head pressure against the sacrum, by turning the baby or changing the angle of it's body entering the pelvis; and to relieve the back pain with positions and comfort measures. Remember to try each position at least through three contractions in order to allow enough time for it to work. If mother is on medication or is told not to leave the bed for medical reasons, discuss your options with your nursing staff and alter or adjust the techniques to accommodate. For example, if you need fetal monitoring, you can still do pelvic rocking leaning against the back of the bed or standing right next to the fetal monitor, leaning over the bedside table. Partners can still apply counterpressure, heat/cold packs and encourage mom to rotate from side to side if she's resting in the side-lying position. Do not sit or lie leaning back if there is a possibility of an OP baby, as that alters the angle of the hips and pelvis and will more than likely increase discomfort, slowing rotation & descent. Pain usually diminishes or subsides after the baby rotates to the anterior position. Occasionally the baby will not turn and may be born "sunny-side up". Other times, the persistent OP baby may need help through the pelvis, with forceps or vacuum extractor. On rare times when baby cannot turn & is unable to come through the pelvis, a cesarean may be indicated. But in most cases, when the above tools are tried early and consistently, that can be avoided. Keep in mind the preventive measures described earlier so you can be working in the last of your pregnancy to do what you can to encourage this baby into the optimal anterior position for delivery!

Nancy Ciocci 3/01