UC San Diego Health

Ouch! Managing Labor Pains

A Q&A with Erica Vu, certified nurse midwife

By Michelle Brubaker | August 29, 2018

We've all seen those movie scenes when a woman in a wheelchair is being rushed through the hospital doors after her water breaks. Cut to the mother-to-be screaming at the top of her lungs while pushing the baby out. Then, the money shot of the new parents staring adoringly at their newborn. But in real life, childbirth can take a lot longer than a few minutes of edited screen time, and there are a variety of ways to manage the pain that comes with bringing a baby into the world.

Erica Vu, certified nurse midwife at UC San Diego Health, talks about the stages of labor, the pain associated with the process and the interventions — both medicated and non-medicated — that are available.

How does a pregnant woman know when she is in labor?

Labor is very mysterious and one can never exactly know when it will start. Most women start to have various labor signs a few hours or weeks even before labor officially begins. These may include:

- Increased vaginal discharge — brown, pink or increased mucous discharge in general is a good sign the cervix is starting to ripen and the mucous plug, the sealed entrance to the uterus, is released.
- Many women notice more pelvis pressure as the baby's head descends in her pelvis. Some call this "lightening" and it can happen weeks before or just as labor is starting.
- Some women start to have more nausea and loose stools or even diarrhea as the body is preparing for labor.
- The most common sign of labor is the increase in cramping associated with abdomen tightening or Braxton hicks. These early contractions usually start in the lower

abdomen/pubic area and radiate towards the lower back. The frequency and duration of these start to increase and become more regular and rhythmic. At times, these contractions can start and increase rapidly, but for most, this can take several hours or even several days. We time the contractions from the start of one to the start of the next contraction. When they are still irregular and more than five minutes apart, most women are still in the cervical ripening/very early labor stage. These irregular contractions may even slow down or stop to give the mom's a break. When the frequency starts to increase and contractions are five minutes apart or less for an hour or more, there tends to be cervical dilation and changes that mark the start of early labor progression.

What are the stages of labor and the pain associated with each stage?

The first stage of labor is cervical dilation, or the opening of the cervix, from 0 to 10 centimeters. Early labor is when the cervix starts to dilate from closed to five centimeters with regular contractions. Early labor contractions tend to be a bit shorter in duration (60 seconds or less) and more menstrual like-cramping in the lower abdomen and back. Early labor can take several hours or even a day or more.

When the contractions intensify, include the upper abdomen and are around two to three minutes apart, active labor is most likely starting, which is the stage from 6 to 10 centimeters. Active labor contractions are a lot stronger, longer (one to two minutes in duration) and almost always necessitate more focus, breathing and position changes/labor support. Women usually also have more regular cervical dilation at intervals of one or more centimeters per hour on average. Of course, every labor can be different for each woman so this can be a variable continuum.

Once women get to 10 centimeters, the second stage of labor starts and pushing begins until the baby is delivered. This can take minutes to hours depending on the baby's position, maternal effort and anesthesia interventions.

The third stage of labor is when the baby is out and the placenta is delivered.

What type of non-medicated interventions does UC San Diego Health provide for labor pain?

Multiple position changes: Walking, lunges, squats, birthing balls, birthing stools and using Rebozos (a fabric shawl originally from Mexico that when placed appropriately can help to lift lower abdomen weight off the pubic bone, squeeze hips with back labor or help during the pushing stage by pulling on the fabric in different positions both sitting, squatting or standing). All of these positions help to move the baby in position to descend down the birth canal while helping the women cope with the contractions. Women can often times focus on the movement instead of the contraction.

Doulas: Women can hire private doulas or ask for one of our volunteer Hearts & Hands Program. Doulas are beneficial in so many ways, but specifically they give continuous non-medical labor

Still of Katherine Heigl and Seth Rogen from Universal Picture's *Knocked Up*.

support, including help with breathing techniques, counter pressure, position changes and massage and can be an advocate for your preference of labor process and birth.

Hydrotherapy (Labor tubs): Buoyancy can help with freedom of movement during contractions. Warm water helps to relax between contractions, eases body aches, including back aces, improves circulation and is a safe and effective form of pain relief.

Showers: Warm water helps with relaxation and decreases maternal tension during the peak of the contractions. Partners are invited to join to help with support.

Waterproof Wireless Monitors: These allow laboring women to be in the shower for pain relief while still allowing the benefits of hydrotherapy and close monitoring of the baby. The wireless monitors also allow women to change positions easily and walk freely about in their rooms or down the hallways if they so desire.

What type of medicated interventions does UC San Diego Health provide for labor pain?

Nitrous Oxide: Nitrous is a gas women breathe in through a mask during contractions. Women are still aware of the contractions, but the nitrous helps to decrease anxiety during them. Some women may experience nausea or dizziness initially but that usually resolves in a few minutes. This intervention allows freedom of movement, such as standing or sitting on a birthing ball, to help the baby descend down the birthing canal. Women can use nitrous as the only form of pain relief or it can also be used as a bridge to other forms of pain relief as labor progresses. It is safe

and effective for both mom and baby. It is not as strong as the gas you receive at your dental office visit and you will not be laughing through labor. It can be used at any time during labor, pushing stage, or even during the repair of lacerations if a mother is unmedicated.

Intravenous Pain Relief: Narcotics or opioids help to relax the mind and body during the peak of the contractions. These help to decrease the sensations of pain, and depending on the stage of labor, may even allow the woman to rest and sleep a bit. It does cross over to the baby through the placenta but in time, just like the mother, it wears off and has little side effects. Some women feel initial dizziness and nausea as well but that often resolves with time. We often combine the narcotic with an anti-emetic (anti-nausea) medication to help but also to prolong the duration of the pain relief. There are different types of narcotics used for different stages of labor to decrease side effects in the newborn in case of a quick delivery.

Regional Anesthesia (Epidurals): This is a pain relief method that decreases pain sensations from the abdomen and below by placing a small tube into in an area surrounding the spinal cord in the lower back and is connected to a pump. The medicine is continuously infusing during the course of labor while women remain awake and alert. Most women do not feel the majority of the pain sensations of contractions, but some will feel the pressure of the baby descending in the pelvis, which helps women to push when ready. Women are not allowed to walk with epidurals but are able to change positions in bed.

Learn more about labor pain management options at UC San Diego Health.

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