

# EPIDURALS

## Facts, Implications and Alternatives

By Kate Engelhardt, D.C., DACCP

**E**pidural anesthesia (EA) is the most commonly used method of pain relief during labor today. In fact, approximately 80 percent of vaginal deliveries involve EA, according to *The Journal of Obstetrics and Gynecology*.

Epidural anesthesia is effective at pain cessation during labor, and may help a woman get through an exhausting and long labor by allowing her to rest. But other well-known and documented outcomes of EA include the following: It slows labor, leading to augmentation with Pitocin; it promotes ineffective pushing, leading to the use of vacuum extraction, forceps and excessive pulling by the birth provider; it often causes a significant drop in blood pressure, leading to the use of electronic fetal monitoring (EFM) for fetal distress; and it requires intravenous fluids for precautionary measures, which often restrict a woman to laboring on her back.

Aside from the physical restraints a woman must overcome in order to manage pain during labor and birth, there is the psychological persona of a laboring woman in pain. I had the opportunity to hear Robbie Davis-Floyd speak at the 2006 Midwifery Today Conference. Her description of today's typical hospital birth was as follows: A woman experiencing normal

labor pain carries an immense amount of strength. Once she enters a hospital, it becomes challenging for her. She exchanges her comfortable and familiar clothing for a hospital gown; she now becomes a "patient." A patient, by definition, is somebody who is being given medical treatment. She finds herself in an institution that has among its key objectives the ability to "control pain." That faint glimmer of strength starts to fade. Why does she feel the pain? No one tells her, but they can make it go away! The fetal monitor and IV are in place, waiting for a crisis to occur.

Davis-Floyd likens this to a woman's umbilical cord connecting to the hospital, essential for her survival. If you plan for something to fail, it probably will. In her book *Birthing From Within*, Pam England remarks that in a hospital the laboring woman regresses from the lead role in her labor and birth to a supporting character.

As you can see, the perception of pain in labor and birth and the omission of this sensation have major psychological and physical detriments to a woman and her baby. Penny Simkin, P.T., author of *Pregnancy, Childbirth and the Newborn*,

states in her 2004 paper entitled "Update on Nonpharmacologic Approaches to Relieve Labor Pain and Prevent Suffering," that "this model places the burden of pain control solely on medical professionals, and the woman's role is one of passive compliance... Because the key to pain relief is held by others, the woman becomes more dependent and powerless, not only in managing her pain but in all other aspects of labor and birth. Self-confidence in the woman's own resources and capabilities and a willingness to be an active participant in her care are not assets in this model."

### Chiropractic Implications

From a chiropractic standpoint, EA can lead to serious consequences for a delicate spine. The World Health Organization reports that several reports and trials showed EA increased the number of vaginal operative deliveries, such as forceps or vacuum extraction. These methods are used for several reasons. A numbed bottom half kills the feedback mechanism to the brain for effective pushing at the right moments. Instead, a machine is read by a third party, who tells the woman when her body is ready for her to push.



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A numbed bottom also prevents a mother from getting off her back and effectively pushing using gravity and strength. Her pelvic capacity becomes limited because of her inability to move around. A prolonged journey through an inadequate space is a recipe for significant stress on a newborn's spine.

Labor augmentation with Pitocin, commonly associated with EA, is frequently administered to make up for the ineffective pushing. The artificial contractions resulting from the Pitocin can place abnormal and unnatural pressure on the cervical spine of a newborn. The dance that mother and baby innately move through between natural uterine contractions during labor is now null and void. The newborn is forced to move with unnatural and forceful contractions. Should the baby not have enough time to move through the natural head flexion, extension, and rotational movements needed for restitution, cervical spine damage can occur. Ineffective pushing may also require assistance to get the baby out of the birth canal. Enter forceps and vacuum extraction. Both interventions place a significant amount of traction and pressure on the cervical spine, spinal cord and brain.

What if EA is used during a vaginal birth, but vacuum and forceps are not? An eye-opening study entitled "Effect of Epidural Anesthesia on Clinician-Applied Force During Vaginal Delivery" from *The American Journal of Obstetrics and Gynecology* showed that OBs applied a significantly greater force of pull on the baby's head and cervical spine when EA was used compared to when it was not. The study used pressure-sensitive gloves to measure the obstetrician's applied force during vaginal delivery. The peak force for delivery of the anterior shoulders was 7.1 +/- 2.7 pounds with EA, versus 4.3 +/- 1.3 pounds without. The peak force rate, which is described as the overall force used to deliver the baby divided by the time required to deliver the baby, was 30.6 +/- 18.9 pounds/second with EA, versus 13.3 +/- 5.8 pounds/second without. The study concludes that the significant difference in force pull was due to "ineffective

pushing" on the woman's part (her fault!). This study validates the concern of the chiropractor, not only when forceps or vacuum extraction has been used, but also with the use of an epidural alone.

Epidural anesthesia has been linked to an increase in cesarean births due to failure to progress. This is because the usual tactics applied after EA are a recipe for a "failure to progress" diagnosis. A cesarean birth requires no expulsive efforts on the woman's part and complete reliance of pull and traction through a small incision in the abdominal wall and uterus. This undeniably puts a significant amount of tension on a newborn's spine and has been linked to a host of newborn and maternal injuries, including nerve damage. Having your newborn's spine checked after birth makes a difference in the function of his or her nervous system.

Perhaps the most concerning of all is the fact that EA is so effective at what it is designed to do—eliminating sensation. Dr. Chung Ha Suh, Ph.D., professor of mechanical engineering at the University of Colorado, received the first-ever National Institute of Health grant for chiropractic research. His research showed that pressure from subluxation equal to the weight of a quarter can decrease nerve transmission by 60 percent. This pressure can occur without any pain, or other signs or symptoms. In other words, the vertebral subluxation complex, a condition in which there is abnormal and decreased movement of the spinal bones, often occurs without any immediate signs or symptoms. Although a newborn can exhibit signs of subluxation, such as difficulty turning his head or colic symptoms, it is very likely there will be no symptoms at all. Combine this with a woman's inability to experience the sensations of birth, and she might assume that no spinal trauma to the baby could have occurred. The literature associated with epidural anesthesia clearly indicates the need for a close evaluation of a newborn's spine soon after birth, and a discussion of epidural use during labor and birth as a must in the chiropractor's office.

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#### Alternatives to Epidurals

There are many safer avenues a woman can explore for pain during labor in place of an epidural. In her paper "Update on Nonpharmacologic Approaches to Relieve Labor Pain and Prevent Suffering," doula and childbirth educator Penny Simkin discusses two different models of care: the medical model and the midwifery model. The former usually involves actions done to the woman to eliminate pain, while the latter focuses on the elimination of suffering by understanding and respecting the process of pain. Simkin also states that the elimination of pain has no bearing on the satisfaction of a woman's birth experience. In fact, women who choose not to use EA consistently report a high level of satisfaction with their birth experience. The midwifery model of care offers "reassurance, guidance, encouragement, and unconditional acceptance." Pain is seen as a normal experience, and not a sign of damage, injury or abnormality.


Adding a doula, a labor support person, to the birth team has been shown to reduce a woman's request for pain medications and epidurals, among other benefits. A woman can go into her labor and birth with certain expectations, which can quickly change when she does not receive support and understanding from her caregivers. Discussing these concerns with the birth provider and the labor and delivery team is important. The hospital staff are trained to be *doers*. And, while it may come with the best of intentions, often *doing* in labor leads to problems that were hoped to be avoided in the first place. I remember hearing a doula suggest to a client to post a sign during her hospital birth, saying, "Natural childbirth in progress. Please do not offer

an epidural. Please do offer support, encouragement and love."

The Farm, a birthing center in Tennessee founded by world-renowned midwife Ina May Gaskin, boasts amazing birth statistics by today's obstetric standards. Of thousands of babies born at The Farm, 96 percent were without any medical assistance. This is quite an achievement considering the C-section rate in the United States is at about 32 percent right now, and has climbed steadily for decades.

In her book, *Ina May's Guide to Childbirth*, Gaskin writes, "When you are injured and feel pain, its message is 'Run away!' or 'Fight!' You are being damaged. This is survival information. The pain of labor and birth has an entirely different message. It says, 'Relax your pelvic

muscles. Let go. Surrender. Go with the flow. Don't fight this. It's bigger than you.'"

Many women today learn to fear birth. It is an unpredictable event. Therefore, anything that appears to control this and make it more predictable appears to be a good thing. Reflecting on her thirty years of practice, Gaskin says, "My experiences as a midwife taught me that women's bodies still work." Chiropractors appreciate and support that women's bodies are designed to work during childbirth and beyond. 



*Dr. Kate Engelhardt practices alongside her husband, Dr. Jason, in their family practice in Lancaster, Massachusetts. She holds a diplomate with the Academy Council on Chiropractic Pediatrics. Dr. Kate is a frequent guest speaker in her community. She is passionate about her priority as a doctor to teach others. She and her husband have two children, Raegan and Nolan. While their births were without interventions, they still both received spinal checkups soon after birth. View article resources and author information here: [pathways.tofamilywellness.org/references.html](http://pathways.tofamilywellness.org/references.html).*