Epidurals—Why You Don't Hear About the Downside of Epidurals
(excerpted from "The Thinking Woman's Guide to a Better Birth" by Henci Goer)

There are several reasons why friends and medical caregivers don't tell you about the problems of epidurals or why, if you bring them up, medical caregivers often brush them aside. To begin with, your friends may not have experienced any side effects—or maybe they did, but no one told them their epidural was the culprit. I attended a labor some years ago where within five minutes of injecting the epidural medication, the baby's heart rate took a nose dive. When it didn't recover within a few minutes, the staff rushed my client off for an emergency cesarean. Everyone told my client that sometimes this happens even with healthy babies. "It was just one of those thing," they said. But it wasn't. Epidurals can cause profound, prolonged drops in babies heart rates.

Your medical caregivers have likely been silent for one or a combination of the following reasons: mindset, money, or ignorance. First, many anesthesiologists, doctors, nurses, and even some midwives tend to live in a black and white world. They believe that labor pain has no value, mastering labor pain has no value, epidurals have no defects. These beliefs color perception in ways that are obvious to those who don't share them but invisible to those who do. For example, two studies that concluded that epidurals significantly increased the likelihood of having a cesarean for poor progress went on to say that this was acceptable because epidurals are so good at relieving pain. Recovering from a cesarean doesn't hurt? Another article recommended epidurals for high-risk babies on the theory that the mother's stress reaction to pain can reduce the blood supply to the placenta and further increase the baby's risk. The same article stated that a fall in maternal blood pressure is the most common epidural side effect, and a high risk baby may not be able to tolerate even a modest drop.

The belief that epidurals protect babies from fetal distress, a belief not uncommon among anesthesiologists and obstetricians, typifies how a mindset works. There isn't a shred of evidence to support it. I have never seen a study where babies whose mothers had epidurals were less likely to experience fetal distress. In fact, the reverse is true. But those who think that labor pain is bad and epidurals are good don't need evidence. All that is required is that the theory fits beliefs, and this one does. It even carries a bonus, lifting epidurals out of the realm of personal choice and providing a rationale for advocacy: "Well, you can choose to martyr yourself, but think about your baby."

Differing definitions of safety also play a part. Doctors often feel unconcerned about side effects—even life-threatening side effects—provided they know what they will do to treat them and that the life-threatening ones occur reasonable rarely. So, two doctors writing for their colleagues can say reassuringly: "These epidural complications should not cause fatalities if trained personnel and adequate resuscitation facilities are available." Loose translation: If a laboring woman develops a life-threatening complication from an epidural, she or her baby won't die of it provided hospital staff are on the ball.

Medical professionals can hardly be blamed for their attitudes. As I explained in the Introduction, these attitudes arise from deep-seated beliefs that go to the heart of what our culture believes about women, labor, pain in general, labor pain in particular, medicine, and technology. Unfortunately, they can lead to an astonishing amount of denial. The American Society of Anesthesiologists put out a 1995 press release recommending that women have epidurals because a study showed they reduced stress

and anxiety in husbands. Consider their nonchalance in the face of what *A Guide to Effective Care in Pregnancy and Childbirth,* also published in 1995, has to say about epidurals. It begins, "Well-established complications include…" and goes on to list low blood pressure with associated nausea and vomiting, prolonged labor, and increased use of forceps, vacuum extraction, and cesarean section. Rare complications, it continues, include nerve damage, toxic drug reactions, breathing difficulties, and maternal death. "Possible, but as yet unproven complications" include problems with urinating, chronic headache, long-term backache, and numbness.

The second reason caregivers may be silent about the dark side of epidurals is that they generate big bucks for anesthesiologists and hospitals. Epidural charges range from $500 to $2500. A hospital consultant explained to me that hospitals have to maintain staff anesthesiologists around the clock to handle obstetric emergencies. In order for these doctors to make what they consider an adequate income, the hospital has to maintain something like an 80 percent epidural rate. **Given this, how strongly do you think medical staff would resist the notion that epidurals are not always a good thing and most women can cope without them?**

Consider the brochure put out by the American Society of Anesthesiologists entitle, "Anesthesia & You…Planning Your Childbirth." It never lies outright, but it skates circles around the truth. Among its evasions, obfuscations, and inversions is the statement that epidural anesthesia "can be safe." The brochure was published in 1992, the same year the authors of a review of the medical literature were dismayed to find only nine reasonable well-designed studies of epidurals conducted over a twenty-year period. The studies totaled less than six hundred women and documented serious complications. The authors concluded that remarkable little was known about the short-term and long-term effects of epidurals.

Finally, caregivers themselves may be misinformed, generally because they are passing on what they have been told. Nurses are particularly prone to this because they tend to get their information about epidurals from obstetricians and, of course, anesthesiologists.

Even your childbirth educator may not tell you about the risks. This may be because she doesn't know them or possibly because she has been gagged. I keep meeting hospital educators who have been forbidden to discuss epidurals in class. Anesthesiologists and obstetricians, they were told, would take care of telling women all they needed to know. In a couple of cases the stated reason was that listing the drawbacks of epidurals might give women second thoughts about having one. In fact, an article in *Ob Gyn News* about the 1998 annual meeting of the Society for Obstetric Anesthesia and Perinatology reports that speakers explicitly expressed concern that controversy around the safety of epidurals might scare women away. They blamed "biased" studies for "misleading patients" and childbirth educators for making data from these studies available to their couples. ("Biased in this case, meant any study concluding that epidurals could cause problems.)

So, for a lot of reasons, you probably won't get objective information about epidurals from the people you would ordinarily trust to give it to you. I will try to give you a more balanced picture of epidurals (and narcotics as well). As with any other medical intervention, such as cesarean sections or IVs, epidurals and narcotics have their place. Certainly, though, the wise woman will not make the decision to have pain medication

lightly, because when it comes to pain medication—and especially when it comes to epidurals—there is no free lunch.

The Epidural Procedure

To prepare you for an epidural, nurses will start an IV and run in about a quart of fluid in an attempt to prevent a fall in blood pressure. They will attach electronic fetal monitor belts in order to pick up any epidural-caused problems with the baby's heart rate. They also place a blood pressure cuff so that your blood pressure can be closely monitored. In some hospitals the cuff periodically inflates and records your pulse and blood pressure automatically. Finally, you will be asked to either sit up on the side of the bed or lie on your side while your back is washed with antiseptic and covered with a sterile drape.

For the actual procedure, you will be asked to arch your back like a "mad cat" or a rainbow. The anesthesiologist will numb the skin with local anesthetic and then will push a large needle between two of the spinal vertebrae a little above the level of your waist. You must hold absolutely still while the needle is in your back even if you have a contraction, and you will p robably have one or two before this part of the procedure is over. The anesthesiologist will guide the needle in slowly and carefully, feeling for the loss of resistance that indicates that the needle is in the epidural space. An epidural is placed outward of the two membranes that cover the spinal cord. The anesthesiologist will perform one or more tests to check that the needle has neither pierced a blood vessel nor gone below the epidural space, which can cause life-threatening complications. These precautions may include pulling back on the plunger of the syringe to see if blood flows in, injecting a small dose of anesthetic and asking if you experience certain sumptoms such as a bitter taste, or injecting a dose of adrenaline (epinephrine) which is supposed to warn that the needle is in a blood vessel by increasing the pulse rate. If all seems well, the anesthesiologist will thread a tiny flexible plastic catheter through the needle and withdraw the needle. Then he or she will inject the full dose of anesthetic, and the catheter will be looped and taped to your back to keep it from shifting position. None of these precautions is fail-safe.

The anesthesiologist will evaluate the quality of anesthesia. If it is inadequate, you may be asked to shift position to redistribute the dose, or the anesthesiologist may inject more. The anesthesiologist will also test the extent of the anesthetized area with pinpricks or ice, which, as with the test dose, may warn that the anesthetic has been delivered into the wrong space.

In order to maintain anesthesia, the anesthesiologist may connect the catheter to a syringe and place the syringe in a pump that slowly depresses the plunger (continuous infusion). This delivers a continuous dose. Alternatively, the anesthesiologist may cap the catheter and return to inject more anesthetic (periodic top-ups) when you complain of returning pain.

Ideally you will feel no pain but will have some control over your legs. However, about 5 to 10 percent of women will experience "windows" of no anesthesia, or the anesthetic will not take on one side despite the anesthesiologist's best efforts. Anesthesiologists may reduce the anesthetic concentration when you approach full cervical dilation so that again, ideally, you remain comfortable but have enough sensation to push effectively.

The procedure can easily take close to an hour if you start from inserting the IV and end when the anesthetic has taken full effect. It can take much longer if the anesthesiologist is not readily available when you request an epidural. The period during which you must hold still generally lasts five to ten minutes.

Most centers use pupivacaine (trade name: Marcaine), but some use lidocaine (trade name: Xylocaine). Anesthesiologists vary considerably as to the amount and concentration of anesthetic they use, but the trend is to use lighter doses in an attempt to minimize side effects. At many hospitals, anesthesiologists have reduced the anesthetic concentration and added a narcotic (narcotic epidural). Some anesthesiologists perform a combined spinal-epidural. The anesthesiologist injects an initial dose of anesthetic or narcotic beneath the outermost membrane covering the spinal cord and inward of the epidural space. He or she then threads a catheter through the needle and withdraws the needle, leaving the catheter in the epidural space.

What an Epidural Does

An epidural stops pain by injecting an anesthetic of the same type that dentists use. An epidural also interferes with the ability to move your legs and with certain functions of the autonomic nervous system such as sweating.

The Trade Offs

Pros: Epidurals almost always completely eliminate pain while leaving you awake and alert. This allows you to rest or sleep. In a difficult labor, epidurals can transform what otherwise would be a harrowing experience into a positive one. In some cases, epidurals seem to promote progress in labors that have gotten "stuck."
Cons: Epidurals slow labor, which results in increased use of IV oxytocin (trade name: Pitocin or "Pit") to stimulate stronger contractions, and usually leads to higher episiotomy rates, forceps or vacuum-extraction rates, and cesarean rates, especially in first-time mothers. Epidurals require electronic fetal monitoring and a precautionary IV. You are also more likely to need bladder catheterization. Body temperature rises over time, so you are more likely to develop fever.

These procedures, problems, and cures have secondary consequences. Electronic fetal monitoring increases the odds of cesarean section. IVs, especially when given in large amounts over a short time, as they are when administering an epidural, can cause fluid overload. Fluid overload lead to fluid in mother's and baby's lungs, maternal anemia, and blood chemistry disturbances in mother and baby. Oxytocin can lead to overly forceful contractions and fetal distress. Forceps delivery and episiotomy increase the probability of anal tears, which can have long-term risks. Maternal fever may stress the baby during labor. And because fever may signal uterine infection, the baby is more likely to be separated from you after birth for observation and subjected to blood tests, a spinal tap, and other diagnostic procedures to rule out this alarming possibility. Some data suggest that epidurals increase the probability of actual infection in the baby.

The procedure itself, apart from the drugs involved, can cause problems. An epinephrine test dose can cause fetal distress. Using air to locate the epidural space can cause neurological and other complications. The catheter can injure blood vessels and irritate nerves.

Potential postpartum complications include temporary urinary incontinence, nerve injury causing temporary muscle weakness or abnormal sensation, a blood-filled swelling (hematoma) and an excruciating, incapacitating headache (spinal headache), which can last for days. In the newborn, epidurals may cause adverse physical and behavioral effects.

Epidurals also cause potentially life-threatening complications. Some women will experience a considerable drop in blood pressure, despite the IV fluid given to prevent it. This may endanger the baby if it is not promptly recognized and countermeasures taken, up to and including an emergency cesarean section if lesser measures fail. Although the anesthetic is delivered into the cerebrospinal fluid and not the bloodstream, it readily passes into maternal blood vessels and crosses the placenta into the baby's circulation. Here, it may act directly to slow the fetal heart, which again may endanger the baby depending on the degree of the effect and whether it is recognized and promptly treated. If the needle or catheter pierces a blood vessel, which is easy to do in pregnancy because blood fessels are enlarged, or the needle goes deeper than the epidural space, or the catheter magrates inward, convulsions, respiratory paralysis, and/or cardiac arrest can occur. These latter two complications have been reported to occur as commonly as 1 in 3,000 cases. To give you some perspective, drugs causing serious adverse reactions in this range have been withdrawn from the market or forced into restricted use. Allergic shock is also a possibility. On rare occasions, women have died from epidural anesthesia. Doctors take precautions to prevent these complications, but they still occur.