Just Say No—to Pain

Today there are better choices for pain relief during labor and delivery

by Denise Grady, *special correspondent*

When it comes to pain medication, women in labor are tough customers. They want to remain awake, alert and in control but free of pain—without side effects that might harm them or their babies.

A decade ago that wish list could not be fulfilled. Anything that gave the mother some relief, it seemed, threatened the baby or slowed labor, increasing the chances of a cesarean section. For instance, narcotics, such as a shot of Demerol, would ease a mother's pain but could interfere with the baby's breathing. Similarly, spinals and epidurals—in which physicians inject painkillers into the sac surrounding the spinal cord or into the epidural space just outside it—would numb the spinal nerves that transmit the pain of uterine contractions but could also make it hard to push. Indeed, women would often be too weak to get out of bed during labor. And spinals could also leave the mother with a ferocious headache caused by the leakage of spinal fluid from the needle puncture.

Although some women eschewed painkillers during labor because they wanted to experience natural childbirth, others wanted relief. But given the risks, many women felt obligated to forgo medication. Some women also succumbed to guilt: during the 1960s, 1970s and 1980s, the social pressure for natural childbirth became so intense that in some quarters there was a sense of shame or dishonor attached to asking for pain medication during labor.

Times have changed. "What anesthesiologists can now provide for pain relief is a lot closer to a natural delivery than it was 10 or 12 years ago," says Richard M. Smiley, director of obstetric anesthesiology at Columbia-Presbyterian Medical Center. "In the vast majority of cases, we're able to achieve 95 to 100 percent pain relief, and the woman is still relatively mobile and still has complete strength."

The trick lies not in a revolutionary new therapy but in combining familiar drugs in new ways for spinal and epidural anesthesia. In the past, doctors giving epidurals would inject a Novocain-like local anesthetic into the epidural space in a woman's spine and leave in the catheter so that additional medication could be injected later. The drug would numb everything below the waist but would also cause considerable weakness. "It was difficult to push," Smiley says, and the medication could sometimes interfere with contractions and impede labor.

Today doctors add small amounts of opioid drugs such as fentanyl to the epidural injection. Opioids ease pain without causing weakness and allow the dose of the Novocain-like drug to be reduced by up to 75 percent. Women remain strong and able to push, and Smiley says he has seen no convincing evidence that this type of anesthesia interferes with labor, although there is still some debate about whether it does.

With the new epidural technique, women may still feel some discomfort and pressure, Smiley notes, but little pain. The technique is most effective during the first stage of labor, which is considered the most painful. The uterine contractions and dilation of the cervix that occur during the first stage produce a visceral type of pain that is particularly hard to tolerate. Most women find it easier to endure the pain of the second stage of labor, in which they deliver the baby through the birth canal.

"Almost all progressive obstetric anesthesiologists now combine locals with opioids," Smiley states. But this method of treatment requires more time and attention from the doctor, who needs to check on the patient every hour or so to make sure her pain is still under control.

Spinal anesthesia is also used more today than it was in the past, according to Smiley, because redesigned needles have greatly reduced the leakage of spinal fluid that causes headaches. Whereas epidurals take about 10 minutes to work, pain relief with a spinal containing either opioids or opioids plus a local anesthetic is almost instantaneous. "The pain relief is so fast that patients love you immediately," he says. The main drawback of a spinal injection is that the pain relief may last only a few hours. In contrast, an epidural can provide continuous relief for as long as the catheter is left in.

"Most of our patients really like the spinal," Smiley observes. "Labor nurses want it for themselves." Some physicians will give a woman a second spinal if she requests it; others prefer not to puncture a woman's spinal membranes twice.

Sheila Goodman, an obstetrician at Fairview University Medical Center in Minneapolis, has also found that women in labor prefer spinal injections. She adds that she herself has tried both spinal and traditional epidural anesthetics for the birth of her own children and that she much preferred the spinal.

Some doctors have been experimenting with a procedure in which they combine low doses of spinal and epidural anesthesia, so that a laboring woman gets both immediate pain relief from the spinal and lasting pain control from the epidural, while retaining her ability to walk. With the combination, "patient satisfaction is superb," according to Michael Nageotte, an obstetrician at Long Beach Memorial Medical Center in California and the lead author of a paper in the *New England Journal of Medicine* last December describing the procedure.

In a study of 761 women giving birth for the first time, Nageotte and his colleagues found that those who had the combined spinal-epidural anesthesia were less likely than those who had epidurals alone to need forceps to help with delivery. But the study also suggested that the odds of needing a cesarean increased if either type of anesthesia was given too early in labor, before the cervix had dilated to four centimeters or more and the baby had descended well into the birth canal.

As for effects on the fetus, Smiley asserts that with the low doses of medication used today, very little of the spinal or epidural injections reach the baby. "It's almost a nonproblem," he says. Epidurals do have the potential to lower the mother's blood pressure and harm the baby by reducing blood flow to the placenta, but Smiley observes that adverse effects from that are very unlikely.

Traditionally, the greatest wariness over the use of painkillers during labor has come from childbirth educators, who tend to advocate natural childbirth and to express concern that medication increases the likelihood of a forceps delivery or a cesarean section. But some counselors now recognize the benefits of anesthesia for women who want it, according to Smiley. "Patients have gone back to [their childbirth educators] and said, 'What [the anesthesiologist] did allowed me to push, and it was a good experience.'"