Non–Drug Strategies Fairly Effective for Labor Pain

In the absence of an epidural, nonpharmacologic techniques should be considered, as well as opioids.

BY SHERRY BOSCHERT
San Francisco Bureau

SAN FRANCISCO — When it comes to relieving labor pain, there's nothing like an epidural.

Beyond that, however, some nonpharmacologic strategies compete well with opioids, the next most common pharmacologic option for treating labor pain, Judith T. Bishop said at a meeting on antepartum and intrapartum management sponsored by the University of California, San Francisco.

Nonpharmacologic techniques should be considered for women who arrive at the labor-and-delivery room too late to get an epidural, women who want to try an unmedicated birth, or women who want to incorporate nonpharmacologic options as stepping-stones to possible use of pain-relieving medications later in labor, she said.

Epidurals or spinal analgesia were received by 76% of 1,573 women who were delivering singletons in U.S. hospitals and who were surveyed for the 2006 Listening to Mothers II Survey Report.

Among those who received epidurals or spinal analgesia, 81% said that they were very helpful, according to the report compiled for the nonprofit organization Childbirth Connection by Eugene R. Declerq, Ph.D., professor of maternal and child health at Boston University, and associates.

Besides epidurals, "the interesting thing is that immersion in a tub or hands-on techniques came up a little bit above the effectiveness of narcotics" for relieving labor pain, although they were less often used than narcotics, said Ms. Bishop, a certified nurse-midwife and professor of ob.gyn. and reproductive sciences at the University of California.

"Many of the other nonpharmacologic techniques are not far behind" in effectiveness, she added. (See box.)

Overall, 69% of women used one or more nonpharmacologic techniques to relieve discomfort in labor.

Ms. Bishop reviewed the evidence for some nonpharmacologic strategies that had been identified as effective by one or more of three published reviews of the literature.

► **Continuous labor support.** This category is a catchall of steps taken usually by a doula, midwife, or nurse.

Continuous labor support typically includes touch, massage, application of cold or heat, and other strategies for physical comfort plus emotional support, a steady flow of information to the mother, and facilitation of communication between the mother and the health care providers.

Studies found fewer fetal malpositions in tub-immersed women and no higher rate of infection in those who rupture membranes while in the tub.

A 2003 Cochrane meta-analysis of 15 randomized, controlled studies with 12,791 women found significant decreases in use of regional analgesia, forceps, or cesarean births and increased likelihood of vaginal birth with continuous labor support.

Women reported 33% less dissatisfaction with labor regardless of pain, compared with unsupported control groups.

A separate 2003 review of studies found less striking results, but concluded that all women should have support during labor and that starting support earlier in labor rather than later maximizes the benefits.

Selected Strategies for Relieving Labor Discomfort

Strategy	Overall Use	Very Helpful	Somewhat Helpful
Epidural/spinal analgesia	76%	81%	10%
Immersion in tub or pool	6%	48%	43%
Hands-on techniques	20%	41%	51%
Narcotics	22%	40%	35%
Use of birthing ball	7%	34%	33%
Shower	4%	33%	45%
Application of hot or cold	6%	31%	50%

Note: Based on the 2006 Listening to Mothers II Survey Report of 1,573 women delivering singletons.
Source: Ms. Bishop

► **Water immersion.** Putting a laboring woman in a warm bath was associated with decreased pain (particularly during the first 30 minutes) and decreased use of epidurals, according to a 2004 Cochrane meta-analysis of eight randomized, controlled trials with 2,939 women.

Two studies found that tub immersion during early labor (before 5-cm dilation) may prolong labor. Individual studies found fewer fetal malpositions in tub-immersed women and no increased rate of infection in those who rupture membranes while in the tub.

"There should be no barriers to women getting into a tub due to misconceptions regarding infection" risk, Ms. Bishop said.

► **Hypnosis.** A very old strategy recently repackaged under the term "hypnobirthing," hypnotic pain relief techniques carry the disadvantages of time and costs needed for training, and the lengthy time needed to implement this into practice, she said.

A 2006 Cochrane review of five trials with 749 women found suggestions of effectiveness in decreasing the need for pharmacologic pain relief and increasing vaginal deliveries and patient satisfaction with pain relief. No adverse outcomes were seen, but hypnosis generally is contraindicated in women with a history of psychosis, she added.

► **Intradermal water injections.** Four randomized, controlled studies found significant reductions in severe back pain for 45-90 minutes but no decrease in requests for medication for abdominal pain using this strategy.

Intradermal water injections involve injecting 0.05-0.1 mL of sterile water into four locations on the lower back—two over each posterior superior iliac spine, and two located 3 cm below and 1 cm medial to the posterior superior iliac spine.

Injections seem to be more effective earlier rather than later in labor. The injections are painful for 20-30 seconds, and the counterirritation of the injection pain may be a mechanism of action for relieving the back pain, she speculated.

► **Acupuncture.** Although the overall evidence that acupuncture can reduce labor pain is encouraging, "it's really difficult to find an acupuncturist willing to be on call to come into labor" rooms, Ms. Bishop said. Midwives in some European countries can take a course to provide acupuncture to patients, something that should be tried in the United States, she added. ■

Consider Screening All for Substance Abuse in Pregnancy

BY SHERRY BOSCHERT
San Francisco Bureau

SAN FRANCISCO — Selectively screening patients for substance abuse in pregnancy is ineffective, Dr. Allison S. Bryant said at a meeting on antepartum and intrapartum management sponsored by the University of California, San Francisco.

"Everyone should be screened. If you don't want to be screening everybody, then you probably should be screening no one," said Dr. Bryant, a perinatologist who is also an assistant adjunct professor in the UCSF Department of Obstetrics, Gynecology and Reproductive Sciences.

Universal screening doesn't take much time—perhaps 30 seconds for a woman who is not using alcohol or drugs during pregnancy or 5-10 minutes for patients who are actively using substances, she said.

The first step in screening is to ask every patient about substance use. "It provides an opportunity for a conversation with every patient," Dr. Bryant said.

Think of potential substance abuse when you see a medical history of frequent hospitalizations, unusual trauma or infections, frequent falls or bruises, chronic mental illness, or diabetes, cirrhosis, hepatitis, or pancreatitis, Dr. Bryant advised.

"I can't tell you how many times during my fellowship I did consults on patients admitted with raging pancreatitis in pregnancy, and they'd had million-dollar workups, and nowhere in the medical charts was there documentation about whether they reported using alcohol during pregnancy," she added.

Some patient behaviors may flag the need for more aggressive screening—behaviors like slurred speech and/or unsteady gait, agitation, disorientation, an appearance of euphoria, or prescription drug–seeking.

Physical clues that should trigger more aggressive screening include tremors, multiple needle marks, inflamed or eroded nasal mucosa, alterations in vital signs, and the dilated or constricted pupils typical of heroin or amphetamine use.

Studies suggest that treatment of substance abuse is as effective as treating other chronic diseases.

DR. BRYANT

More aggressive screening usually means administering a urine toxicology test, best used after a positive interview screen.

Under most state laws, physicians must obtain consent for a maternal toxicology screen, whereas toxicology screening of infants can be performed without maternal consent.

"Sometimes I see patients who had screening due to acute labor or partial premature rupture of membranes. In our particular setting, I don't think that's warranted," she said.

"Patients who present with an abruption, on the other hand, probably all should be consented for a tox screen for cocaine use."

Among pregnant women, approximately 15% abuse alcohol, 20% smoke cigarettes, 2% abuse marijuana, 0.3% abuse cocaine, and 0.7% use other illicit drugs, according to a national survey from 1996 to 1998.

Studies suggest that treatment of substance abuse is as effective as treating other chronic diseases, Dr. Bryant said. ■