Oxytocin Change Cut Emergency Cesareans

BY BETSY BATES

CHICAGO — The modification of the oxytocin infusion protocol at a large university-affiliated community hospital nearly halved the number of emergency cesarean deliveries over a 3-year period, reported Dr. Gary Ventolino.

As oxytocin utilization declined from 93.3% to 78.9%, emergency caesarean deliveries decreased from 10.9% to 5.7%, Dr. Ventolino said at the annual meeting of the American College of Obstetricians and Gynecologists. Other birth outcomes improved as well at an 848-bed community hospital that serves as the primary teaching hospital of the Boonshoft School of Medicine at Wright State University in Dayton, Ohio.

These included significant declines in emergency vacuum and forceps deliveries and a sharp reduction in neonatal ICU team mobilization for signs of fetal distress (P = .0001 in year 3 compared with year 1).

“More and more data are showing us that we are using too much oxytocin too often,” Dr. Ventolino, professor and chair of obstetrics and gynecology at the university, said in an interview.

“Our pivotal change was to modify the oxytocin infusion from 2 by 2 units every 20 minutes to 1 by 1 unit every 30 minutes. And we see the results,” he said.

In the year 3 compared with year 1, deliveries fell from 4% to 2.3%.

The overall cesarean section rate remained unchanged, as did the rates of cord prolapse, preeclampsia, and abruption.

Dr. Ventolino cited a recent article in the American Journal of Obstetrics and Gynecology that suggests guidelines for oxytocin use, including avoidance of dose increases at intervals shorter than 30 minutes in most situations (Am. J. Obstet. Gynecol. 2009;200:35.e1-6).

Dr. Ventolino and his associates reported no financial conflicts of interest relevant to the study.

Anesthesia Type in C-Sections: Preterm Outcomes Unaffected

BY HEIDI SPLETE

WASHINGTON — No significant differences in neonatal outcomes were found among premature infants of women who had spinal anesthesia versus general anesthesia for cesarean delivery, based on the results of a study of 78 deliveries.

Most data on anesthesia and elective C-sections come from studies of term infants, said Dr. Robin Russell and colleagues at the John Radcliffe Hospital in Oxford, England. Data from one recent review of premature infants suggested that neonatal mortality risk was greater with spinal anesthesia than with general anesthesia, the researchers noted.

In this study, Dr. Russell and associates reviewed information from 78 women who were delivered at less than 37 weeks’ gestation at a single hospital (69 singleton and 9 twin deliveries); the average age of the women was 31 years. The results were presented in a poster at the annual meeting of the Society for Obstetric Anesthesia and Perinatology.

Spinal anesthesia (SA) was used in 58 cases, general anesthesia (GA) in 18 cases, and an epidural in 2 cases. The researchers compared the outcomes for the SA and GA cases based on Apgar scores and umbilical blood gas levels.

Overall, Apgar scores were not significantly different between the spinal and general anesthesia groups. The median 1-minute Apgar score was 8 in the SA group (range, 2-10) and 7 in the GA group (range, 3-9), and the median 5-minute Apgar scores were 8 in the SA group and 9 in the GA group.

Measures of umbilical venous gases were available for 49 SA deliveries and 15 GA deliveries, and measures of umbilical arterial gases were available for 51 SA deliveries and 13 GA deliveries. Based on these measures, there were no significant differences between the groups.

In addition, the birth weights were similar between the two groups, and no significant differences were observed between very low birthweight (VLBW) infants at 28 days or 3 months of age.

The results contrast with findings from previous research, but the study was limited by its small size and retrospective design, the researchers said. “Further work is needed to determine the optimal mode of anesthesia for cesarean section in premature infants,” they wrote. The investigators reported that they had no financial conflicts to disclose.

An interview.

Several members of her family in Mexico had influenza diagnostic testing was negative. Dr. Briggs is an editor of “Drugs in Pregnancy and Lactation.”

H1N1 Virus Infection

The following day, she was seen in her obstetrician’s office and a nasopharyngeal swab sample was collected and sent for virus testing. She was treated with antivirals, oseltamivir or oral inhaled zanamivir (Relarenza). Treatment should be started within 2 days of the onset of symptoms, but can be started as late as 48 hours after the onset of symptoms. The CDC Web site has an informational page on what pregnant women should know about H1N1 virus (www.cdc.gov/H1N1FLU/guidance/pregnant.htm). You may want to print the answers to common questions and provide them to patients as a handout.

Mr. Briggs is a pharmacist clinical specialist, Women’s Pavilion, Miller Children’s Hospital, Long Beach, Calif.; a clinical professor of pharmacy, University of California, San Francisco; and an adjunct professor of pharmacy, University of Southern California, Los Angeles. He is also a fellow of the American College of Clinical Pharmacy and coauthor of “Drugs in Pregnancy and Lactation.”