# VBAC Mortality Unchanged After Guideline Issued

BY DAMIAN McNAMARA
*Miami Bureau*

NEW ORLEANS — Neonatal and maternal mortality in California did not significantly change after the American College of Obstetricians and Gynecologists recommended vaginal births after cesarean delivery be performed only in settings with "immediately available" emergency care, according to a study.

Very low-birth-weight infants were the only group to experience significantly higher mortality associated with vaginal births after cesarean (VBACs). When the American College of Obstetricians and Gynecologists (ACOG) was contacted for comment, a representative criticized the study design and its implications.

In 1996, ACOG encouraged VBACs, John Zweifler, M.D., said at the annual conference of the Society of Teachers of Family Medicine. In 1998, the college changed its recommendations on VBACs and stated they should be attempted only where emergency care is "readily available." The following year, ACOG further restricted the recommendations to settings where emergency care is "immediately available." The college retained the wording of these recommendations in its latest update, Practice Bulletin No. 54 (Obstet. Gynecol. 2004;104:203-12).

"But for those of us in rural settings, this could impair our ability to do VBACs," Dr. Zweifler said. "We were concerned that a change in ACOG guidelines would have deleterious effect on our [residency] program."

Dr. Zweifler and research fellow Susan Hughes compared neonatal and maternal deaths from 1996 to 2002. They reviewed maternal demographics, birth data, and outcomes, noting previous C-sections and whether hospitals were in rural or urban areas. California Birth Statistical Master Files consider mortality to be associated with birth if it occurs within 72 hours of delivery, said Dr. Zweifler, director of the University of California, San Francisco's Fresno Family Medicine Residency Program.

There were more than 3.5 million single births in California in the seven years, including 2.7 million vaginal births, 456,000 primary cesarean sections, and 386,000 deliveries to women with a history of C-section. Of the women with a history of cesarean delivery, 311,000 had a repeat cesarean, and 74,000 had an attempted VBAC. There were 61,000 successful VBACs and 13,000 failed ones.

VBAC rates decreased from 1996 to 2002, reflecting national trends, Ms. Hughes said. The biggest decrease was in rural VBACs.

"There were very few maternal deaths—about 35. So statistically, there were no differences in maternal mortality between time periods or attempted VBAC, versus repeat cesareans," Ms. Hughes said.

There was a statistically significant increase in mortality for infants weighing less than 1,500 grams. "Attempted VBACs in both time periods had higher death rates than repeat cesareans," Ms. Hughes said.

However, there were no significant differences in mortality for infants born weighing more than 1,500 grams, including those greater than 4,000 grams.

Reliability of birth certificate data was a possible limitation of the study, Ms. Hughes said. In addition, there was no information on morbidities, such as uterine rupture or newborn encephalopathy.

"The more restrictive ACOG guidelines have not improved VBAC-related neonatal or maternal mortality," Dr. Zweifler said.

"ACOG's recommendation is purely based on the fact there is no more catastrophic event that befalls women than uterine rupture," said Gary Hankins, M.D., chair of the ACOG Committee on Obstetric Practice. "Studies clearly show that if you are not really available to respond to this emergency in a very quick fashion—generally less than 30 minutes—you can expect, in a significant number of cases, either the death of the baby or permanent neurologic injury of the baby from birth asphyxia."

"That being the case, we opt to promote standards of safety, and patient safety if our first order is why these recommendations are made," said Dr. Hankins, professor of obstetrics and gynecology at the University of Texas, Galveston.

The data used for the study—derived from Birth Statistical Master Files—are insufficient to address all the safety issues concerning VBAC deliveries, Dr. Hankins said. "I would challenge either of these people to see if they have ever stood on the front line and dealt with a woman who has had a uterine rupture." ■