Manual Placenta Removal May Not Up Blood Loss

BY PATRICE WENDLING
Chicago Bureau

DALLAS — Manual removal of the placenta during cesarean delivery did not significantly increase maternal blood loss when compared with spontaneous removal in a prospective, randomized controlled trial of 86 women.

The study's primary outcome of change in hematocrit was not significantly different between the 40 women whose placenta was delivered manually and the 46 women whose placenta was delivered spontaneously (4.4% vs. 4.9%). Mean pre- and postoperative hematocrit levels were 35% and 31% versus 35% and 30%, Dr. Shawana Swann reported at the annual meeting of the Society for Maternal-Fetal Medicine.

In addition, there was no difference in the percentage of patients with a drop in hematocrit of greater than 3% (28% vs. 35%) or greater than 5% (15% vs. 17%), said Dr. Swann of the Medical University of South Carolina in Charleston. None of the women in the study developed endometritis or received blood transfusions during hospitalization.

Placental delivery time was shorter in the manual group with a mean time of 49 seconds versus 71 seconds in the spontaneous group. This was statistically significant, but not clinically significant, as the difference was just 22 seconds, said Dr. Swann, who presented the results on behalf of principal investigator Dr. Eva Pressman of the University of Rochester (N.Y.) and their associates.

The manual and spontaneous groups were similar in terms of age (32 vs. 31 years), parity (1), and median gestational age (39 weeks).

"We believe providers should not base the mode of placental delivery on blood loss considerations for scheduled cesarean deliveries," Dr. Swann said.

Proponents of manual removal suggest that faster placental removal leads to more rapid closure of the uterine incision and therefore less bleeding from this site.

Those preferring spontaneous separation and controlled cord traction contend that allowing dilated sinuses in the uterine wall to contract prior to placental expulsion decreases bleeding from the placental bed, and that this method is associated with lower rates of infection, she said.

An audience member asked why the findings were different from those of more than a dozen previous trials comparing the two methods of placental removal, including a recent meta-analysis of six randomized trials involving more than 1,700 women (Am. J. Obstet. Gynecol. 2005;193:1607-17).

The investigators who conducted the meta-analysis had reported that a benefit for spontaneous removal was usually found in the few studies that recorded blood loss or changes in hemoglobin/hematocrit level. They concluded that spontaneous removal should be preferred to manual removal, given the significant decrease in endometritis (odds ratio 0.62) demonstrated in the five studies that reported this outcome.

Dr. Swann responded that most studies performed prior to 2002 used estimated blood loss rather than hematocrit levels as the outcomes measure. Limitations of the current study, she said, included not collecting data on body mass index, which may affect blood loss and rates of infection, and the fact that hematocrit levels can be affected by administration of intravenous fluid and extravascular fluid shifts during cesarean delivery.

The study was sponsored by the Medical University of South Carolina and the University of Rochester.

Dr. Swann did not disclose any relevant financial conflicts of interest. ■