Use of Form Improves Dystocia Documentation

BY SHERRY BOSCHERT

FROM THE ANNUAL MEETING OF THE AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS

SAN FRANCISCO — Adoption of a standardized form for use during deliveries involving shoulder dystocia significantly improved documentation of some information at one institution, according to Dr. Vasiliki A. Moragianni.

A comparison of charts for 100 patients with deliveries involving shoulder dystocia before implementation of the standardized form in August 2003 and charts for 80 patients after adoption of the form found significant increases in the proportion of charts documenting the head-to-shoulder delivery interval and the estimated fetal weight.

Shoulder dystocia was the third-leading cause of obstetric litigation in one analysis.

DR. MORAGIANNI

Better documentation of shoulder dystocia cases could reduce legal risk, said Dr. Moragianni, whose presentation earned a second-place prize for clinical investigation at the meeting.

Before use of the form, 39 of 100 physicians (39%) documented estimated fetal weight, compared with 67 of 80 physicians (84%) after adoption of the form. The rate of documenting the head-to-shoulder delivery interval increased from 15 physicians (15%) in the earlier time period to 62 of 80 (77%) after adoption of the form.

The results show that adding a standardized form for shoulder dystocia cases improves documentation beyond what's recorded in standardized delivery forms already in use, she said. The standardized form for shoulder dystocia improved documentation of an item already included in the delivery form (estimated fetal weight) and an item not previously included (head-to-shoulder delivery interval), reported Dr. Moragianni of Beth Israel Deaconess Medical Center, Boston.

The investigators selected charts from the 2% of deliveries that involve shoulder dystocia at Abington (Pa.) Memorial Hospital, where Dr. Moragianni completed her residency training. The new form included documentation of estimated fetal weight, umbilical cord pH, the maneuvers used in managing shoulder dystocia, the head-to-shoulder delivery interval, the duration of the second stage of labor, and estimated blood loss.

Except for the head-to-shoulder delivery interval and estimated fetal weight, documentation did not change significantly between the two time periods.

Documentation of maneuvers used for shoulder dystocia included the type and the order of maneuvers tried, and adjuncts to maneuvers, but not the exact timing of maneuvers. The form did include records of delivery times for the head and shoulders.

The study's findings may be limited by the small number of cases, the retrospective design, and the concurrent "drills" for managing shoulder dystocia that were held at the hospital, she said.

The form might be improved by adding documentation of the team members involved in managing the case of shoulder dystocia and their training levels, the fetal head position (whether the presenting shoulder was anterior or posterior), and the condition of the infant's arms immediately following surgery, Dr. Moragianni added.

"Every obstetrician in the hospital is completing the form," she noted.

Shoulder dystocia was the third-leading cause of obstetric litigation in one analysis, accounting for 14% of obstetric lawsuits. Poor documentation drove 54% of these cases, which resulted in an average payout of $429,000 (Obstet. Gynecol. 2008;112:1279-83), she noted. ■

VITALS

Major Finding: Before use of the form, 39% of physicians documented estimated fetal weight, compared with 84% after adoption. The rate of documenting the head-to-shoulder delivery interval increased from 15% in the earlier time period to 77% after adoption of the form.

Data Source: Comparison of records for 100 deliveries with shoulder dystocia before use of the standardized form and 80 deliveries with shoulder dystocia afterward at one institution.

Disclosures: None was reported.

Cervical Length Measurement Predicts Preterm Delivery

BY SHERRY BOSCHERT

FROM THE ANNUAL MEETING OF THE AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS

SAN FRANCISCO — A disposable probe that measures vaginal cervical length during speculum examination appeared to be similar in efficacy to fetal fibronectin testing for predicting the likelihood of preterm delivery, in a study of 52 at-risk women.

VITALS

Major Finding: Measurements of vaginal cervical length using a disposable probe were similar to fetal fibronectin tests in predicting the likelihood of preterm delivery in women with threatened preterm labor.

Data Source: Study of 52 women with threatened preterm labor.

Disclosures: One of Dr. Burwick's associates in the study, Dr. Michael Ross, is medical director of CerviLenz Inc., the company that makes the device, and provided it free to the study. The investigators reported having no other conflicts of interest.

A cervical length less than 30 mm as measured by the CerviLenz probe correlated with fetal fibronectin positivity and with preterm birth within 7 days, Dr. Richard M. Burwick reported at the meeting.

The sensitivity for preterm delivery within 7 days was 67% with either a CerviLenz measurement of less than 30 mm or fetal fibronectin positivity. The specificity was 83% with the CerviLenz probe and 78% with fetal fibronectin, reported Dr. Burwick, who led the study at Harbor-UCLA Medical Center before moving to Brigham and Women's Hospital, Boston.

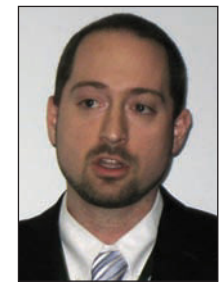
The positive predictive value for preterm delivery within 7 days was 22% with a CerviLenz measurement of less than 30 mm and 17% with fetal fibronectin positivity, and the negative predictive value was 97% in each group.

Both measures were less accurate in predicting delivery prior to 37 weeks' gestation. Sensitivity was 29% with a CerviLenz measurement of vaginal cervical length less than 30 mm and 40% with fetal fibronectin positivity. Specificity was 81% and 80%, respectively. The positive predictive value for delivery before 37 weeks was 22% with the CerviLenz measure and 33% with fetal fibronectin results, and the negative predictive value was 85% and 84%, respectively.

"Symptomatic women with a CerviLenz cervical length of less than 30 mm should undergo further observation and consideration of tocolytic and maternal glucocorticoid therapy," Dr. Burwick said.

Immediate and quantifiable measures of cervical length using the CerviLenz probe may be less variable than the most common way of measuring—by digital exam—and speedier than waiting for fetal fibronectin results, he suggested. The CerviLenz probe also can be used after intercourse or bleeding, he added.

In a previous study by some of the same investigators in the current study, the CerviLenz probe had good predictive value compared with transvaginal ultrasound in identifying women with a cervix shorter than 30 mm (J. Reprod. Med. 2007;52:385-9).



Sensitivity for preterm delivery within 7 days was 67% with either the CerviLenz probe or fetal fibronectin.

DR. BURWICK

The study enrolled women with singletons at 24-34 weeks' gestational age who were at risk for preterm delivery, with uterine contractions, less than 3 cm cervical dilation, intact membranes, and no vaginal bleeding or recent intercourse. During a speculum examination, fetal fibronectin was collected, cervical length was measured by the CerviLenz probe, and cervical cultures were taken in most patients.

Fetal fibronectin tests in 49 patients were positive in 12 (24%), and CerviLenz measurements were less than 30 mm in 9 of 43 patients (21%). The mean cervical length measurement was 34 mm. The cohort was predominantly Hispanic (38 patients), and 15 patients had a prior preterm birth.

Previous data have shown that only 21%-27% of women with symptoms of preterm labor will have preterm births. Cervical length and cervical effacement help assess preterm birth risk in symptomatic women.

In asymptomatic women, cervical length shorter than 25 mm has been linked to a sixfold increase in risk for preterm birth. ■