

Early Delivery Improves Mortality Among Twins

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RENO, NEV. — Obstetricians are delivering more sets of twins early—a trend that is improving neonatal mortality, Cande V. Ananth, Ph.D., said at the annual meeting of the Society for Maternal-Fetal Medicine.

Black twins, however, are not benefiting equally by this more aggressive practice. According to federal statistics, 44% of white and 53% of black twin births occurred before 37 weeks' gestation in 1989. In 2000, those percentages rose to 57% for whites and 61% for blacks.

These increases largely reflected obstetricians' decisions to deliver twin infants early—but more so among whites, said Dr. Ananth of the department of obstetrics and gynecology at the University of Medicine and Dentistry of New Jersey, New Brunswick.

Medically indicated preterm delivery among white twins rose 51% for the 11-year period, and 33% among black twins.

Among the whites, this medically in-

dicated early delivery significantly affected perinatal mortality, defined as stillbirth after 22 weeks' gestation or neonatal mortality within 28 days of birth.

Perinatal mortality decreased by 41% during the period overall. It fell by 31% among the medically indicated deliveries, and, because of the large increase in medically indicated preterm births among whites, that 37% reduction accounted for 10% of the overall decline.

Among the black twins, perinatal mortality declined 37% overall and 34% among medically indicated preterm births. However, largely because the increase in medically indicated preterm deliveries was less in blacks, that decline accounted for only 5% of the overall drop.

A reduction in mortality tied to births following premature rupture of membranes was more important among blacks.

The study also found that preterm birth following spontaneous onset of labor rose 3% among white twins and fell 1% among black twins. Preterm birth following premature rupture of membranes fell 3% among whites and 7% among blacks. ■

Twin VBAC Not Associated With Increased Risk of Rupture

RENO, NEVADA — Attempting vaginal birth after cesarean section in twin deliveries may be no more risky than attempting VBAC in singleton pregnancies, according to a review of almost 25,000 deliveries.

The review found that women with twins who had a prior C-section were less likely to attempt a vaginal birth but that they had the same rate of VBAC failures and no higher rate of maternal complications, Alison Cahill, M.D., and her associates wrote in a poster presentation at the annual meeting of the Society for Maternal-Fetal Medicine.

Women with twins should not be discouraged from making a VBAC attempt if that is their desire, according to data reported by Dr. Cahill of the University of Pennsylvania, Philadelphia, and her colleagues.

The study's subjects were patients from 17 different tertiary and community hos-

pitals who were delivered between 1996 and 2000, and who were identified by coding in their pregnancy records as having had a previous cesarean section.

Of the 24,842 deliveries identified, 535 were twin pregnancies.

A total of 33% of the mothers with twins chose to attempt VBAC, compared with 55% of the women with singleton pregnancies.

The VBAC failed in 24% of the attempts of both groups.

Uterine rupture occurred in 2 of the twin pregnancies (1% of those who attempted VBAC), and 125 of the singleton pregnancies (also 1%).

In addition, 3% of the women with twins who attempted VBAC had either a uterine rupture, uterine artery laceration, bladder injury, and/or bowel injury.

That compared with 2% of the women with singletons, the researchers reported in the poster. ■

Women with twins who had a prior C-section had the same rate of VBAC failures and no higher rate of maternal complications.

Vacuum Associated With More Dystocia Than Forceps

RENO, NEVADA — Forceps delivery is associated with more perineal tears than is vacuum delivery, but the vacuum is associated with more complications for the infant, including shoulder dystocia, Aaron B. Caughey, M.D., said at the annual meeting of the Society for Maternal-Fetal Medicine.

Dr. Caughey presented results of a review of 4,120 consecutive, operative, vaginal deliveries of singleton, term neonates at a University of California, San Francisco, hospital, and those results surprised him, he said during an interview.

His hypothesis at the start of the study was that he would see more shoulder dystocia in the neonates delivered with forceps, because doctors would choose the forceps for bigger babies. What he found, however, is consistent with another recent study, which looked at deliveries at many different institutions (Obstet. Gynecol. Surv. 2005;60:86-7).

In the study by Dr. Caughey and his colleagues at the university, shoulder dystocia occurred in 2% of the forceps deliveries, compared with 4% of the vacuum deliveries.

Cephalohematoma occurred in 4% of the forceps deliveries and 15% of the vacuum deliveries, Dr. Caughey wrote in a poster presentation.

On the maternal side, there was a difference in third- and fourth-degree perineal and cervical tears (37% for the forceps deliveries, versus 27% for the vacuum deliveries).

The study found no significant differ-

ence in more serious birth trauma, which included skull and clavicle fracture, intracranial hemorrhage, facial nerve palsy, and Erb's palsy (1.7% for forceps and 2.1% for vacuum).

But the children delivered with the vacuum were more likely to have a 5-minute Apgar score that was less than 7 (4% vs. 3%) and to have neonatal jaundice (13% vs. 10%).

In the interview, Dr. Caughey said his study adds to what the previous study reported because that study used a database of births nationwide—data in which coding and practices could differ.

His data, culled from a single institution, likely reflect more consistent practice, he said.

Of the study's 4,120 deliveries, 2,045 were forceps deliveries and 2,075 were vacuum-assisted deliveries.

The differences in outcome overall remained consistent even when the investigators took into account factors such as birth weight, station at delivery, length of the first and second stages of labor, and episiotomy.

The study results indicate that the trade-off in choosing which device to use is that one puts the mother at risk for tears, while the other entails risk for the neonate, Dr. Caughey noted.

In most of those situations, therefore, he is going to choose putting the mother at risk, he said.

Certainly, with multiparous women, the forceps make more sense because they have less likelihood of tearing, he added. ■

GYNECARE TVT*

Tension-free Support for Incontinence

GYNECARE TVT* with abdominal guides

Tension-free Support for Incontinence

GYNECARE TVT* Obturator System

Tension-free Support for Incontinence

SUMMARY OF PACKAGE INSERT

INDICATIONS

GYNECARE TVT, GYNECARE TVT with abdominal guides and GYNECARE TVT Obturator System are intended to be used in women as suburethral slings for the treatment of stress urinary incontinence (SUI) resulting from urethral hypermobility and/or intrinsic sphincter deficiency.

CONTRAINDICATIONS

As with any suspension surgery, these procedures should not be performed in pregnant patients. Additionally, because the PROLENE* polypropylene mesh will not stretch significantly, it should not be performed in patients with future growth potential including women with plans for future pregnancy.

WARNINGS AND PRECAUTIONS

- Do not use these devices for patients who are on anti-coagulation therapy.
- Do not use these devices for patients who have a urinary tract infection.
- Users should be familiar with surgical technique for urethral suspensions and should be adequately trained in these procedures before employing these devices.
- Acceptable surgical practice should be followed for these procedures as well as for the management of contaminated or infected wounds.
- These procedures should be performed with care to avoid large vessels, nerves, bladder and bowel. Attention to patient anatomy and correct passage of the device will minimize risks.
- Bleeding may occur postoperatively. Observe for any symptoms or signs before releasing the patient from hospital.
- Do not remove the plastic sheaths until the tape has been properly positioned.
- Ensure that the tape is placed with no tension under the midurethra.
- PROLENE mesh in contaminated areas should be used with the understanding that subsequent infection may require removal of the material.
- Do not perform these procedures if you think the surgical site may be infected or contaminated.
- Since no clinical information is available about pregnancy following a suburethral sling procedure with these devices, the patient should be counseled that future pregnancies may negate the effects of the surgical procedure and the patient may again become incontinent.
- Since no clinical information is available about vaginal delivery following these procedures, in case of pregnancy delivery via cesarean section should be considered.
- Postoperatively, the patient should be advised to refrain from heavy lifting and/or exercise (e.g., cycling, jogging) for at least three to four weeks and intercourse for one month. The patient can usually return to other normal activity after one or two weeks.
- Should dysuria, bleeding or other problems occur, the patient is instructed to contact the surgeon immediately.
- All surgical instruments are subject to wear and damage under normal use. Before use, the instrument should be visually inspected. Defective instruments or instruments that appear to be corroded should not be used and should be discarded.
- As with other incontinence procedures, de novo detrusor instability may occur following these procedures. To minimize this risk, make sure to place the tape tension-free in the midurethral position.
- Do not contact the PROLENE mesh with any staples, clips or clamps as mechanical damage to the mesh may occur.
- Do not resterilize any single-use devices or components. Discard opened, unused devices.
- Prophylactic antibiotics can be administered according to the surgeon's usual practice.

WARNINGS AND PRECAUTIONS – additional for GYNECARE TVT / GYNECARE TVT with abdominal guides

- The abdominal guide should not be used to pull the interlocked system upward toward the abdomen.
- Ensure there is a snug connection between the guide and coupler and the coupler and TVT needle.
- Cystoscopy should be performed to confirm bladder integrity or recognize a bladder perforation.
- The rigid catheter guide should then be gently pushed into the Foley catheter so that the catheter guide does not extend into the holes of the Foley catheter.
- When removing the rigid catheter guide, open the handle completely so that the catheter retains properly in place.

WARNINGS AND PRECAUTIONS – additional for GYNECARE TVT Obturator System

- Although bladder injury is unlikely to occur with this technique, cystoscopy may be performed at the discretion of the surgeon.
- Transient leg pain lasting 24-48 hours may occur and can usually be managed with mild analgesics.

ADVERSE REACTIONS

- Punctures or lacerations of vessels, nerves, bladder, urethra or bowel may occur during needle passage and may require surgical repair.
- Transitory local irritation at the wound site and a transitory foreign body response may occur. This response could result in extrusion, erosion, fistula formation or inflammation.
- As with all foreign bodies, PROLENE mesh may potentiate an existing infection. The plastic sheaths initially covering the PROLENE mesh are designed to minimize the risk of contamination.
- Over correction, i.e. too much tension applied to the tape, may cause temporary or permanent lower urinary tract obstruction.

References: 1. Nilsson CG, Rezapour M, Falconer C. 7 year follow-up of the tension-free vaginal tape (TVT) procedure. *Int Urogynecol J*. IUGA Abstract 116 (89). October 2003. 2. American Medical Systems receives patent for innovative SPARC Sling System. American Medical Systems Web site. Available at: <http://www.AmericanMedicalSystems.com>. Accessed January 13, 2004.

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