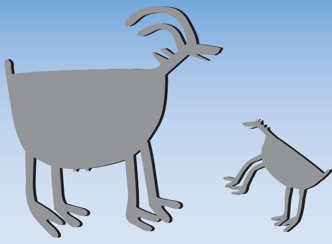

CCC Corner

NATIONAL COUNCIL OF CHIEF CLINICAL CONSULTANTS

Focus on the Health of American Indians and Alaska Natives

Vol 5, No 11
Dec 2007

30 minute rule…

not a requirement and ‘immediately available’ defined locally

Stanley Zinberg, M.D., ACOG Deputy Executive Vice President published comments recently on the background and meaning of the so called ’30 minute rule’. Dr. Zinberg references the 2006 National Institute of Child Health and Human Development (NICHD) article by Bloom SL et al (below) and the subsequent letters to the editor.

The NICHD results found that in the great majority of cases, providers effectively triage emergency cesarean deliveries when given the capability to begin the operation within 30 minutes, which is what was intended when the ACOG/AAP guideline was promulgated. In addition, approximately one third of primary cesarean deliveries performed for emergency indications are commenced more than 30 minutes after the decision to operate, and the majority were for nonreassuring heart rate tracings. In these cases, adverse neonatal outcomes were not increased.

The required personnel should be in the hospital, or immediately available, to perform emergency cesarean delivery. The immediately available phrase was intended to be a guideline that could be implemented nationally, including in rural settings. ACOG recognizes that each institution should define “immediately available” based on its resources and geographic location.

The ACOG/AAP guideline on emergency cesarean delivery does not establish the 30-minute interval to be a requirement that all cesarean deliveries must be performed within 30 minutes of the decision. The recent NICHD data found that most infants delivered for emergency indications were not compromised, whether delivered less than or more than 30 minutes from the decision to operate.

Decision-to-incision times and maternal and infant outcomes

RESULTS: Of the 11,481 primary cesarean deliveries, 2,808 were performed for an emergency indication. Of these, 1,814 (65%) began within 30 minutes of the decision to operate. Maternal complication rates, including endometritis, wound infection, and operative injury, were not related to the decision-to-incision interval. Measures of newborn compromise including umbilical artery pH less than 7 and intubation in the delivery room were significantly greater when the cesarean delivery was commenced within 30 minutes, likely attesting to the need for expedited delivery. Of the infants with indications for an emergency cesarean delivery who were delivered more than 30 minutes after the decision to operate, 95% did not experience a measure of newborn compromise. CONCLUSION: Approximately one third of primary cesarean deliveries performed for emergency indications are commenced more than 30 minutes after the decision to operate, and the majority were for nonreassuring heart rate tracings. In these cases, adverse neonatal outcomes were not increased. LEVEL OF EVIDENCE: II-2.

Bloom SL, et al Decision-to-incision times and maternal and infant outcomes. Obstet Gynecol. 2006 Jul;108(1):6-11.

OB/GYN CCC Editorial

The Rule of Parley was really more of a ‘guideline’

I assume most of you have seen the first of the three Pirates of the Caribbean films, the 2003 Walt Disney film Curse of the Black Pearl. If not, at one point Elizabeth Swann (Keira Knightley) daughter of the Port Royal, Jamaica Governor, Weatherby Swann, finds herself captured by pirates.

After her capture Ms Swann invokes the ‘Rule of Parley’—an agreement ensuring one’s safety until meeting and negotiating with the opposing side—when she is presented to the pirate Captain Hector Barbossa (Geoffrey Rush) on the deck of the pirate ship the Black Pearl. Captain Barbossa initially

(continued on page 15)

THIS MONTH

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Clarification

In November there was a CCCC article *SBE prophylaxis not recommended for genitourinary or gastrointestinal tract procedures.* The article explained that SBE prophylaxis is not indicated in the majority of routine cases. The posting did note the 6 conditions for which prophylaxis is still indicated, though:

- Prosthetic heart valves
- A prior history of infective endocarditis
- Unrepaired cyanotic congenital heart disease
- Completely repaired congenital heart defects with prosthetic material or device
- Repaired congenital heart disease with residual defects
- Cardiac valvulopathy in a transplanted heart

Questions? nmurphy@scf.cc

Also on-line….

Subscribe to the listserv and receive reminders about this service. If you have any questions, please contact me at nmurphy@scf.cc

Neil J. Murphy

Dr. Neil Murphy
Ob/Gyn–
Chief Clinical Consultant (C.C.C.)

IHS Child Health Notes

> *"It doesn't matter if the cat is black or white as long as it catches mice."*
> —Deng Hsaio P'ing (1904–1997)

Quote of the month

"Good artists copy, great artists steal."
—Pablo Picasso

Articles of Interest

U.S. Food and Drug Administration Public Health Advisory: Nonprescription cough and cold medicine use in children. August 15, 2007

The FDA issued a public health advisory on non-prescription cough and cold medicines in children. Highlights included:

- Parents should not use cough and cold products in children < 2 years unless instructed by their physician
- Parents should use only a dropper or dosing cup or dosing spoon provided with the medication
- Parents should administer only the specified amount of medication

Editorial Comment

It will soon be cough and cold season. All parents want to make their children feel better. The FDA advisory suggests that non-prescription cough and cold medicines have significant risks and little benefit and their use should be limited.

This advisory follows a CDC report in January of 2007 that reported on infant deaths associated with cough and cold medications.

There is no evidence that non-prescription medication alleviates cough and cold symptoms in children. There is now good evidence that there are risks with these medications, especially in younger children and infants. Most of the serious morbidity and mortality related to inappropriate dosing hence the FDA warning to consult a physician and an emphasis on correct measuring of medication.

A final word on treatment of colds for this winter. A recent literature review looked at treatment of cold symptoms with zinc. Zinc lozenges and nasal sprays are available as non-prescription medications. There is a perception that zinc is a natural remedy and less toxic. The review found little evidence that zinc improved cold symptoms. There were several reports of anosmia with use of intranasal zinc. Again, the best remedy for a cold is rest, anti-pyretics, fluid and maybe chicken soup.

Treatment of naturally acquired common colds with zinc: a structured review. Clin Infect Dis. 2007

Infectious Disease Updates.

Rosalyn Singleton, MD, MPH

Vaccines Shortages: PedvaxHIB®

Merck & Co., Inc. has reported that PedvaxHIB® is unavailable for shipment. Based on the latest information, Merck expects PedvaxHIB® (PRP-OMP) to be available sometime in the first quarter of 2008. Merck reports that the exact timing is dependent upon resolution of a manufacturing issue. There are currently adequate amounts of ComVax® (PRP-OMP/Hepatitis B) to meet historical demand, but not to meet additional demand. Updates of vaccine availability may be found at: http://www.cdc.gov/vaccines/vac-gen/shortages/default.htm#chart

IHS has made an official request to CDC that American Indian/Alaska Native (AI/AN) children be prioritized for PedvaxHIB® vaccine, citing the 2006 Redbook statement:

"Before availability and public use of conjugated Hib vaccines, the incidence of invasive Hib disease was up to 10 times higher among young AI/AN children compared with the general US population. Because of the high risk of invasive Hib disease within the first 6 months of life in many AI/AN infant populations, the Indian Health Service (IHS) and the AAP recommend that the first dose of Hib conjugate vaccine contain polyribosylribitol phosphate-meningococcal outer membrane protein (PRP-OMP) as a single-antigen vaccine or in a combination vaccine with other antigens. The administration of a PRP-OMP-containing vaccine leads to more rapid seroconversion to protective concentrations of antibody within the first 6 months of life, and failure of use has been associated with excess cases of Hib disease in young infants in this population....Thus for clinics that serve predominantly AI/AN children, it may be prudent to use only a PRP-OMP Hib vaccine."

CDC has tentatively agreed to prioritize PedvaxHIB® for AI/AN children; however we are waiting for final language. If you currently use PedvaxHIB® we recommend that you do the following:

1. Check with your state VFC program re: PedvaxHIB® and ComVax® supply
2. We will send the CDC prioritization language as soon as it is finalized so that you can work with your state VFC program to continue administering PedvaxHIB®
3. If supply is limited at the moment, we recommend that you use PedvaxHIB® or ComVax® for the primary series (first two doses) if possible.

Recent literature on American Indian/ Alaskan Native Health

Doug Esposito, MD

Holve S.

An Observational Study of the Association of Fluoride Varnish Applied During Well Child Visits and the Prevention of Early Childhood Caries in American Indian Children.

Matern Child Health J. 2007 Oct 24; [Epub ahead of print]

Editorial Comment

This observational study evaluates the efficacy of a fluoride varnish application strategy in a rural reservation community. Early Childhood Caries (ECC), the most common chronic disease of childhood, disparately afflicts American Indian/Alaska Native kids at an alarming six fold greater rate than their white counterparts. Although many healthcare workers and families have the perception that this condition is little more than a minor annoyance whose effects are perhaps purely cosmetic, ECC is frequently debilitating and negatively and significantly impacts child wellbeing. Documented and preventable consequences of ECC include increased caries in permanent teeth, hospitalization, increased emergency room visits, increased treatment costs, impacts on optimal child development (especially height, weight, and speech), lost school days, impacts on educational attainment, and decreased quality of life. Carious teeth surely hurt! ECC is an important and prevalent disease that has received little attention from pediatricians until fairly recently.

This study demonstrates that four or more applications of fluoride varnish in early childhood can reduce the burden of dental caries in a very high-risk population of children. Applications targeted the 9, 12, 15, 18, 24, and 30 month well child visit. Beyond the demonstrated reduction in "decayed, missing, or filled surfaces" (dmfs) score that was used as the study outcome, fluoride varnish applications in the well child visit setting are known to be quick and efficient from both a time and manpower perspective, and in some states, represent a fully billable service.

Please, please, please implement a fluoride varnish program soon in your practice setting, if you haven't already. We pediatricians, in partnership with our pediatric dentist colleagues and in combination with new and promising strategies on the horizon, will likely have the capacity to one day eliminate ECC as a health disparity in American Indian/Alaska Native children. We must position ourselves to be able to implement these new strategies as soon as they become available. The universal application of fluoride varnish in AI/AN children, although not perfect, is an important step in the right direction. At a minimum, you will be doing your individual patients and families an important service. But, the greater goal is the elimination of those pesky and tenacious health disparities!

Additional Reading:

Hale KJ; American Academy of Pediatrics Section on Pediatric Dentistry. Oral health risk assessment timing and establishment of the dental home. Pediatrics. 2003 May;111(5 Pt 1):1113-6.

Development of a culturally appropriate, home-based nutrition and physical activity curriculum for Wisconsin American Indian families.

LaRowe TL, Wubben DP, Cronin KA, Vannatter SM, Adams AK. Prev Chronic Dis. 2007 Oct;4(4):A109.

Editorial Comment

Using the community participatory research model, the authors describe the development and implementation of a home-based intervention targeting childhood obesity. This program seeks to bring about lasting lifestyle changes related to improved nutrition and increased physical activity among Head Start children and their families living on three Wisconsin American Indian reservations.

The project employs community mentors to deliver a culturally specific curriculum to children at an age critical to the development of lasting food preferences and physical activity patterns. Through the alteration of the child's home environment, the researchers seek to impact health outcomes (obesity) through the promotion of durable positive health behaviors. Specific behaviors being targeted include: "1) increasing fruit and vegetable intake; 2) increasing physical activity; 3) decreasing consumption of candy, soda, and other sweetened beverages; and 4) decreasing television viewing time." Makes sense, right?

Only recently implemented, it will be interesting to see the effect of this 12 month project. Depending on the strength and durability of the effect, this program might be appropriately adapted for use in other American Indian communities. Stay tuned.

Announcements from the AAP Indian Health Special Interest Group

Sunnah Kim, MS

Locums Tenens and Job Opportunities

If you have a short or long term opportunity in an IHS, Tribal or Urban facility that you'd like for us to publicize (i.e. AAP Web site or complimentary ad on Ped Jobs, the official AAP on-line job board), please forward the information to indianhealth@aap.org or complete the online locum tenens form at: www.aap.org/nach/locumtenens.htm

From Your Colleagues

Burt Attico, Phoenix

Random glucose test would have missed 5 of 6 women with GDM

OBJECTIVE: To compare the accuracy measures of the random glucose test and the 50-g glucose challenge test as screening tests for gestational diabetes mellitus (GDM). RESEARCH DESIGN AND METHODS: In this prospective cohort study, pregnant women without preexisting diabetes in two perinatal centers in the Netherlands underwent a random glucose test and a 50-g glucose challenge test between 24 and 28 weeks of gestation. If one of the screening tests exceeded predefined threshold values, the 75-g oral glucose tolerance test (OGTT) was performed within 1 week. Furthermore, the OGTT was performed in a random sample of women in whom both screening tests were normal. GDM was considered present when the OGTT (reference test) exceeded predefined threshold values. Receiver operating characteristic (ROC) analysis was used to evaluate the performance of the two screening tests. The results were corrected for verification bias.

RESULTS: We included 1,301 women. The OGTT was performed in 322 women. After correction for verification bias, the random glucose test showed an area under the ROC curve of 0.69 (95% CI 0.61-0.78), whereas the glucose challenge test had an area under the curve of 0.88 (0.83-0.93). There was a significant difference in area under the curve of the two tests of 0.19 (0.11-0.27) in favor of the 50-g glucose challenge test.

CONCLUSIONS: In screening for GDM, the 50-g glucose challenge test is more useful than the random glucose test.

The authors recommend that despite easy implementation, low costs, and relative high specificity, random glucose measurement should not be used as a screening test for GDM. Until superior screening alternatives become available, the 50-g glucose challenge test should be the preferred screening test for GDM.

OB/GYN CCC Editorial

Glucose Challenge Better Than Random Glucose to Screen for Gestational Diabetes

Wouldn't it be easier just to perform a random blood glucose to be able to screen or diagnose gestational diabetes mellitus (GDM)?

Yes, it would be easier.

Unfortunately, the random glucose test would have missed 5 of 6 women with GDM.

Though well meaning, some providers try apply the use of basal maintanence glucose levels to GDM screening. Instead these providers subject their patients to multiple other inaccurate screens, e. g., random blood glucose, fasting glucose, and 2 hour post prandial levels. In the end their patients are subject more individual venopunctures and less accruate screening.

GDM is diagnosis based on a carbohydrate challenge, not basal levels. On the other hand, management after the diagnosis has been made, is based on daily fasting and post parandial levels. We should take care not to confuse the two different processes.

van Leeuwen M, et al Comparison of accuracy measures of two screening tests for gestational diabetes mellitus. Diabetes Care. 2007 Nov;30(11):2779-84. Epub 2007 Aug 13.

Hot Topics

Obstetrics

Cesarean delivery in Native American women: are low rates explained by practice style?

CONCLUSIONS: Despite a higher prevalence of medical risk factors for cesarean delivery, the rate at this hospital was well below New Mexico (16.4%, all races) and national (21.2%, all races) cesarean rates for 1998. Medical and practice-related factors were the only observed independent correlates of cesarean delivery. Implementation of institutional and practitioner policies common to the Indian Health Service may reduce cesarean deliveries in other populations

Mahoney SF, Malcoe LH. Cesarean delivery in Native American women: are low rates explained by practices common to the Indian health service? Birth. 2005 Sep;32(3):170-8.

OB/GYN CCC Editorial

The online CCCC Obstetrics Section features 4 other articles that discuss the advantages/disadvantages to vaginal after cesarean and cesarean delivery.

Clear liquids in limited quantities do not increase labor complications

Revised Guidelines for Obstetric Anesthesia Issued

The American Society of Anesthesiologists (ASA) has issued revised, evidence-based practice guidelines for anesthetic management of women during labor, including operative and nonoperative deliveries, postpartum care and pain control.

The guidelines update guidelines issued in 1998 and "include data and recommendations on a wider range of techniques than was previously addressed."

The guidelines also provide information for women to consider before receiving anesthetics during childbirth.

"Not all women require anesthetic care during labor and delivery," Dr. Joy L. Hawkins, from University of Colorado, Denver, and chair of the ASA Task Force on Practice Guidelines for Obstetric Anesthesia said in a statement.

If a woman does request pain relief during labor and delivery, there are many options available, Dr. Hawkins said, depending on the patient's medical status, progress of labor and the resources available at the healthcare facility.

"The revised practice guidelines do not guarantee specific outcomes, but provide basic recommendations based on a synthesis of expert research and recommendations," Dr. Hawkins continued.

Among the revised recommendations:

- Women in early labor should be offered the option of spinal or epidural analgesia when available and it should not be withheld to meet arbitrary standards for cervical dilation. Women should be reassured that neuraxial analgesia does not increase the incidence of cesarean section.
- The use of spinals or epidurals is preferred over general anesthesia for most cesarean sections.
- To minimize post dural (spinal) headache, pencil-point spinal needles should be used instead of cutting-bevel spinal needles for spinal anesthesia.
- Drinking clear liquids in limited quantities has been found to bring comfort to women in labor and does not increase labor complications. Women with uncomplicated labor may drink small amounts of clear liquid, while those scheduled for nonemergency cesarean section may drink small amounts of clear liquids up to 2 hours before anesthesia administration.
- Solid foods should be avoided by patients during labor. Women scheduled for elective cesarean section or tubal ligation should fast for 6 to 8 hours prior to anesthesia administration.

Practice guidelines for obstetric anesthesia: An updated report by the American Society of Anesthesiologists Task Force on Obstetric Anesthesia. American Society of Anesthesiologists Task Force on Obstetric Anesthesia. Anesthesiology. 2007 Apr;106(4):843-63

Gynecology

HPV test beats Pap in detecting cervical cancer

A new study led by McGill University researchers shows that the human papillomavirus (HPV) screening test is far more accurate than the traditional Pap test in detecting cervical cancer. Moreover, because of its higher sensitivity and only slightly lower specificity, patients would only require an HPV test once every three years instead of annually, as is necessary with the Pap test.

CONCLUSIONS: As compared with Pap testing, HPV testing has greater sensitivity for the detection of cervical intraepithelial neoplasia

Mayrand MH, et al Human papillomavirus DNA versus Papanicolaou screening tests for cervical cancer.N Engl J Med. 2007 Oct 18;357(16):1579-88.

OB/GYN CCC Editorial

We still use the new 2006 ASCCP Consensus Guidelines

CCCaST is the first randomized controlled trial in North America of HPV testing as a stand-alone screening test for cervical cancer. The first round followed 10,154 women aged 30 to 69 in Montreal, Quebec and St. John's, Newfoundland who were enrolled in the study from 2002 to 2005.

While the above results are of interest, I suggest you adhere to the new 2006 ASCCP Consensus Guidelines which can be found here: www.asccp.org/consensus.shtml

Which Factors Influence Progression of Pelvic Prolapse?

Conclusion: The authors conclude that vaginal descent is common in postmenopausal women, but that the rate of progression is variable and the condition can regress. Only one in 10 women had descent of 2 cm or more, and the risk of descent was related to obesity and a history of at least five vaginal births. Clinically significant progression over the three-year study was rare. The authors believe that women with evidence of vaginal descent can be reassured that they are at low risk of significant progression over three years.

Bradley CS, et al. Natural history of pelvic organ prolapse in postmenopausal women. Obstet Gynecol April 2007;109:848-54

Child Health

Long-term prognosis for infants after massive fetomaternal hemorrhage

RESULTS: During the study period, 48 patients had massive fetomaternal hemorrhage (crude incidence 1.1 per 1,000; corrected incidence for Rh-negative women 4.6 per 1,000). Six fetal deaths were observed, representing 1.6% of all fetal deaths during the period. Nine newborns (18.7%) were transferred to neonatal intensive care unit (NICU) and five (10.4%) had transfusions. Fetomaternal hemorrhages of 20 mL/kg or more significantly increased the risk of fetal death, induced preterm delivery, transfer to NICU, and neonatal anemia requiring transfusion. Long-term follow-up was not associated with neurological sequelae (0%, 95% confidence interval 0.0-11.6%).

Rubod C et al Long-term prognosis for infants after massive fetomaternal hemorrhage. Obstet Gynecol. 2007 Aug;110(2 Pt 1):256-60.

CONCLUSION: When the transfused volume equals or exceeds 20 mL/kg, massive fetomaternal hemorrhage may lead to severe prenatal or neonatal complications. LEVEL OF EVIDENCE: III.

Increasing hyperglycemia in pregnancy associated with increased childhood obesity

CONCLUSIONS: Our results in a multiethnic U.S. population suggest that increasing hyperglycemia in pregnancy is associated with an increased risk of childhood obesity. More research is needed to determine whether treatment of GDM may be a modifiable risk factor for childhood obesity.

Hillier TA, et al Childhood obesity and metabolic imprinting: the ongoing effects of maternal hyperglycemia. Diabetes Care. 2007 Sep;30(9):2287-92.

Chronic disease and Illness

Heart Disease Kills More Younger Women

For decades, heart disease death rates have been falling. But a new study shows a troubling turn: more women under 45 are dying of heart disease due to clogged arteries, and the death rate for men that age has leveled off. Many aren't sure what went wrong, but they think increasing rates of obesity and other risk factors are to blame.

Conclusions: The mortality rates for CHD among younger adults may serve as a sentinel event. Unfavorable trends in several risk factors for CHD provide a likely explanation for the observed mortality rates.

Ford ES,Capewell S. Coronary Heart Disease Mortality Among Young Adults in the U.S. From 1980 Through 2002 J Am Coll Cardiol, 2007; 50:2128-2132,

Low-Carbohydrate Diet Effective in Women

Conclusion: The authors conclude that patients on the Atkins diet have greater weight loss at two and six months than those on the Zone, Ornish, or LEARN diets and have greater weight loss at one year than those on the Zone diet. Atkins dieters also have more favorable lipid profiles and blood pressures at various measurements, suggesting that concerns about how low-carbohydrate diets affect cardiac risk factors are unfounded.

Gardner CD, et al. Comparison of the Atkins, Zone, Ornish, and LEARN diets for change in weight and related risk factors among overweight premenopausal women. The A to Z weight loss study: a randomized trial. JAMA March 7, 2007;297:969-77.

High suicide and heart disease deaths with bariatric surgery

Conclusion: There was a substantial excess of deaths owing to suicide and coronary heart disease. Careful monitoring of bariatric surgical procedures and more intense follow-up could likely reduce the long-term case fatality rate in this patient population.

Omalu BI et al Death rates and causes of death after bariatric surgery for Pennsylvania residents, 1995 to 2004. Arch Surg. 2007 Oct;142(10):923-8; discussion 929

Features

ACOG, American College of Obstetricians and Gynecologists

Use of Psychiatric Medications During Pregnancy and Lactation

Summary of Recommendations and Conclusions

The following recommendations and conclusions are based on good and consistent scientific evidence (Level A):

- Lithium exposure in pregnancy may be associated with a small increase in congenital cardiac malformations, with a risk ratio of 1.2–7.7.
- Valproate exposure in pregnancy is associated with an increased risk of fetal anomalies, including neural tube defects, fetal valproate syndrome, and long-term adverse neurocognitive effects. It should be avoided in pregnancy, if possible, especially during the first trimester.
- Carbamazepine exposure in pregnancy is associated with fetal carbamazepine syndrome. It should be avoided in pregnancy, if possible, especially during the first trimester.
- Maternal benzodiazepine use shortly before delivery is associated with floppy infant syndrome.

The following recommendations and conclusions are based on limited or inconsistent scientific evidence (Level B):

- Paroxetine use in pregnant women and women planning pregnancy should be avoided, if possible. Fetal echocardiography should be considered for women who are exposed to paroxetine in early pregnancy.
- Prenatal benzodiazepine exposure increased the risk of oral cleft, although the absolute risk increased by 0.01%.
- Lamotrigine is a potential maintenance therapy option for pregnant women with bipolar disorder because of its protective effects against bipolar depression, general tolerability, and a growing reproductive safety profile relative to alternative mood stabilizers.
- Maternal psychiatric illness, if inadequately treated or untreated, may result in poor compliance with prenatal care, inadequate nutrition, exposure to additional medication or herbal remedies, increased alcohol and tobacco use, deficits in mother–infant bonding, and disruptions within the family environment.

The following recommendations and conclusions are based primarily on consensus and expert opinion (Level C):

- Whenever possible, multidisciplinary management involving the patient's obstetrician, mental health clinician, primary health care provider, and pediatrician is recommended to facilitate care.
- Use of a single medication at a higher dose is favored over the use of multiple medications for the treatment of psychiatric illness during pregnancy.
- The physiologic alterations of pregnancy may affect the absorption, distribution, metabolism, and elimination of lithium, and close monitoring of lithium levels during pregnancy and postpartum is recommended.
- For women who breastfeed, measuring serum levels in the neonate is not recommended.
- Treatment with all SSRIs or selective norepinephrine reuptake inhibitors or both during pregnancy should be individualized.
- Fetal assessment with fetal echocardiogram should be considered in pregnant women exposed to lithium in the first trimester.

Use of Psychiatric Medications During Pregnancy and Lactation. ACOG Practice Bulletin No. 87. American College of Obstetricians and Gynecologists. Obstet Gynecol 2007; 110:1179-98

AFP, American Family Physician

Predicting the Likelihood of Successful Vaginal Birth After Cesarean Delivery

Clinical Question: Which patients are likely to have a successful vaginal birth after a previous cesarean delivery?

Evidence Summary: The American College of Obstetricians and Gynecologists and the American Academy of Family Physicians recommend that pregnant women with a single previous cesarean delivery and a low-transverse incision be offered a trial of labor. Although the rate of vaginal birth after cesarean delivery (VBAC) increased from 19 percent of all deliveries in 1989 to a peak of 28 percent in 1996, the rate decreased to only 9.2 percent of all deliveries in 2004. The decline has been partially driven by concerns about the small but measurable risk of uterine rupture with VBAC, particularly when labor is induced or augmented.

At the same time, the total number of cesarean deliveries has been increasing, largely because of an increase in primary cesarean deliveries. A screening tool to help predict whether a woman will have a successful VBAC may help patients and their physicians make more informed shared decisions.

A 2003 evidence review by the Agency for Healthcare Research and Quality found overall VBAC success rates between 60 and 82 percent in published studies, with an estimated overall success rate of 75 percent at teaching institutions and tertiary medical centers. The risks of perinatal death or hysterectomy from uterine scar rupture were low (1.5 and 4.8 per 10,000 births, respectively). The review identified factors associated with an increased likelihood of vaginal delivery (i.e., maternal age younger than 40 years, previous successful vaginal delivery, and favorable cervical factors). The review also identified factors that decreased the likelihood of vaginal birth (i.e., more than one previous cesarean delivery; induction of labor; birth weight greater than 4,000 g [8 lb, 13 oz]; and gestational age greater than 40 weeks).

A number of researchers have attempted to develop clinical decision rules to predict the likelihood of a successful trial of labor after a previous cesarean delivery. A 2004 systematic review identified six of these clinical decision rules, two of which were validated (i.e., tested in a new population to confirm accuracy of the rule). Three subsequent rules were developed and validated. These five validated rules are summarized in Table 1 (see link below)

Although the Troyer rule was validated, the number of patients in the validation group was small. The Hashima rule was also prospec-

tively validated; however, only three out of 5,414 women had a score of 0, and only 101 had a score of 1 (low probability of success). The remaining 5,310 women had scores of 2 (53 percent success rate) or 3 (67 percent success rate), which provides little useful information for decision making.

The remaining three scores were well validated and were shown to be accurate in a large, representative population. The Flamm rule (Table 2) (see link below) is the simplest to use, although it is limited by its age (data were gathered between 1990 and 1992) and by the requirement of cervical effacement information, which makes it unhelpful for antepartum planning.

The Smith rule is well validated but is based on a multivariate equation, making it too complex for practical use at the point of care. Although the Grobman rule is also based on a complex multivariate equation, a nomogram (Figure 1) (see link below) is provided for use at the point of care.

The Grobman rule has been well validated and all of the needed variables are available to the patient and physician before the onset of labor.)

Applying the Evidence

A 25-year-old, non-Hispanic, white woman with a body mass index (BMI) of 25 kg per m2 is in labor. Her cervix is 3 cm dilated and about 30 to 40 percent effaced. She has had one previous pregnancy, which resulted in cesarean delivery because of failure to progress. She wonders how likely it is that a trial of labor will be successful.

Answer: Using the Flamm rule (Table 2) (see link below) the patient receives two points for age and one for cervical effacement. The total score of 3 gives her a 60 percent probability of vaginal delivery. Using the Grobman nomogram (Figure 1), (see link below) the patient receives 10 points for age, 30 for body mass index, points each for being non-African American and non-Hispanic, and 0 for no history of vaginal birth or recurrent primary indication. The total score of 54 points gives her a 68 percent probability of vaginal delivery. You advise the patient that her chance of a successful trial of labor is about two out of three. http://www.aafp.org/afp/20071015/poc.html Point-of-Care Guides

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Ask a Librarian

Diane Cooper, M.S.L.S./NIH

The Healthy Heart Handbook for Women '07

20th Anniversary Edition

This newly revised handbook, with a special message from First Lady Laura Bush, provides new information on women's heart disease and practical suggestions for reducing your own personal risk of heart-related problems. The handbook presents the latest information on how to live a healthier and longer life, by taking action steps to prevent and control heart disease risk factors.

You'll also find new tips on following a nutritious eating plan, tailoring your physical activity program to your particular goals, quitting smoking, and getting your whole family involved in heart healthy living. The Healthy Heart Handbook for Women is part of The Heart Truth for Women, a national public awareness campaign for women about heart disease sponsored by the National Heart, Lung and Blood Institute (NHLBI) and many other groups. Diane.Cooper2@ihs.gov

Breastfeeding

Amy Patterson, California Area Indian Health Service

Getting it Right

Breastfeeding Promotion: Good Public Health Policy (Part 2 of 2)

During pregnancy, the mother's body changes to prepare itself for lactation so that she can successfully nurse her infant. There are truly very few cases in which a mother is physically unable to breastfeed.

Breastfeeding is natural, but it takes some time to learn to do it correctly. With few exceptions—discussed below—all pregnant women should be encouraged to breastfeed, and to learn about breastfeeding through classes run by hospitals or lactation consultants. Hospital policies can also make a difference; in particular, "rooming-in" and encouraging nursing within the first hour of birth both increase the chance of breastfeeding success. After birth, nursing mothers should receive help from their hospital's lactation consultant to make sure they and their babies are getting off to the right start. If a nursing mother is having problems with latching or is concerned about milk supply, a lactation consultant can evaluate and help. An IBCLC (International Board Certified Lactation Consultant) credential represents the "gold standard" for lactation counseling. IBCLCs are certified after hundreds of hours of consulting and academic training; they must also pass a rigorous, comprehensive exam. To find a certified consultant, go to www.ilca.org, and click on "Find a Lactation Consultant in Your Area."

Newborn babies who are breastfed need to eat frequently; it is not uncommon for them to wake many times a night to nurse. Providers can let new parents know that while this will interrupt their normal sleep cycles for a while, it is temporary; as a baby gets older they go longer in between feedings. Night waking is a normal feature of newborns; even formula-fed babies wake at night to eat. There are also special advantages to breastfeeding; although a nursing baby may wake a bit more frequently than a formula-fed baby, the nursing mother has no bottles to prepare in the middle of the night and can comfort her infant immediately. Remind mothers that this is also true during the day when they are out of the house, and means they will not have to carry bottles or formula around. California law also protects the rights of mothers to nurse in public.

Also, remind new mothers that there are significant health benefits from nursing. Nursing infants also get sick less often, which means fewer trips to the doctor, and fewer nights spent caring for a sick baby. The longer a woman nurses, the greater the health benefits for her baby. Breastfeeding can continue as long as it is beneficial for both mother and child- there is no time limit on how many months or years a woman should nurse.

Nursing can also continue after a mother returns to work. A nursing mother can nurse her baby in the evenings, overnight, and in the mornings. Then, she can pump her milk while at work and store it for caregivers to give to her baby while she is at work. Nursing mothers have rights under California State Law for break time and privacy to pump milk while at work.

However, there are some women for whom breastfeeding is not advised. Women who are HIV positive should not breastfeed because of the risk of transmitting the virus to the baby. Also, women with active, untreated TB (tuberculosis) or who are receiving any kind of chemotherapy should not breastfeed.

Women who are breastfeeding should not take illegal drugs. Some

drugs, such as methamphetamine, cocaine and PCP, can affect the baby and cause serious side effects. Other drugs, such as heroin and marijuana can cause irritability, poor sleeping patterns, tremors, and vomiting. Babies can become addicted to these drugs. If a mother is addicted and can not get off these drugs, she should not breastfeed. However, mothers undergoing methadone treatment may breastfeed.

Mothers who smoke should be encouraged to quit as soon as possible. However, even if they cannot, it is still better to breastfeed, as long as they do not smoke near their infants.

Most common illnesses, such as colds, flu, or diarrhea, can not be passed through breast milk. In fact, when a mother is sick, her breast milk will have antibodies in it that will help protect infants from getting the same sickness.

GPRA

The Indian Health Service has a developmental GPRA measure on exclusive and near exclusive breastfeeding rates among 2 month old infants, with the goal of increasing breastfeeding rates among these and older infants. RPMS users can use a PCC Infant Feeding Tool to record infant feeding status; this information is captured in RPMS and extracted by the Clinical Reporting System (CRS). Sites using PCC, RPMS and CRS can monitor the feeding status of their infant population by running CRS reports.

The Indian Health Service uses Healthy People 2010 objectives whenever possible for its GPRA targets. The Healthy People 2010 goal is to have at least 75 percent of mothers breastfeeding during the early postpartum period and 50 and 25 percent breastfeeding at 6 months and 1 year, respectively. In 1998, 64 percent of all mothers breastfed their infants during the early postpartum period. 29 and 16 percent of mothers breastfed their infants at 6 months and 1 year, respectively. This data is for all races; no comprehensive national data on breastfeeding rates among American Indians and Alaska Natives yet exists.

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Featured Website

David Gahn, IHS MCH Portal Web Site Content Coordinator

Lack of VZIG and new prenatal assessment of varicella immunity addressed: New module

The new Perinatology Corner Module, Varicella (Chickenpox) in Preg¬nancy covers all the following and much more

- The manufacturer has discontinued production, so the availability of VZIG is rapidly declining, since the only manufacturer of this product has ceased production..
  What should you do about the lack of available VZIG?
- The CDC has recommended the use of "VariZIG", a purified lyophilized human immune globulin preparation prepared from plasma with high levels of anti-varicella antibodies. It is only available however under an "investigational new drug application expanded access protocol" from the sole U.S. distributor. And informed consent must be obtained prior to use. Turn around time for your laboratory is obviously critical to stay within the 4-day window.
  How readily available is VariZIG at your service unit? Where will you obtain it ad how quickly can it arrive?
- Prenatal assessment of women for evidence of varicella immunity is recommended. Birth before 1980 is not considered evidence of immunity for pregnant women because of potential severe consequences of varicella infection during pregnancy, including infection of the fetus.
  How should that be implemented?

Go to this link. Get the free CME or just use the many resources available

http://www.ihs.gov/MedicalPrograms/MCH/M/PNC/VC01.cfm

Frequently asked questions

Q. Where can I get copies of the lecture notes from the 2007 Women's Health and MCH Conference that was held in Albuquerque on August 15–17th ?

A. Most of the lecture notes are posted on the MCH Meeting Notes web site now, as are the professional group reports. More slides will be made available as they arrive. Please contact nmurphy@scf.cc if the slides you want are not online.

Go here http://www.ihs.gov/MedicalPrograms/MCH/F/lecNotes.cfm

MCH Alert

Tightening the "holes" in the Swiss cheese model of patient safety in obstetrics

Most health care professionals who are involved in efforts to improve patient safety are aware of James Reason's "Swiss cheese" model of how accidents occur. Some elements and pressures of current obstetric practice may weaken defenses and safeguards against perinatal injury. Several components of obstetric care in labor and delivery units can be used as targets for tightening the "holes" in the Swiss cheese model. These include improving communications, preparing for rare critical events through simulation training, developing protocols for administration of important medications used in labor and delivery (oxytocin, misoprostol, and magnesium sulfate), increasing the in-house presence of obstetricians, developing an effective departmental infrastructure that includes effective peer review, providing risk management education about high-risk clinical areas that have the potential to result in catastrophic injury, and staffing the unit for all contingencies during all hours, day and night. Acceptance by the obstetric medical staff is critical to the implementation of these patient safety elements.

Veltman LL. Getting to havarti: moving toward patient safety in obstetrics. Obstet Gynecol. 2007 Nov;110(5):1146-50

MCH Headlines

Judy Thierry HQE

Frequently Asked Questions about Infant Feeding Choice

BACKGROUND INFORMATION

Why collect this data? Because it is used in the clinical performance measure called Breastfeeding Rates that is reported in the RPMS Clinical Reporting System (CRS). While this measure is currently not a GPRA measure (one reported to Congress and OMB) it is used in support of the GPRA measure Childhood Weight Control with the goal of lowering the incidence of childhood obesity in the IHS patient population. Additionally, facilities can use this data to track infant feeding patterns and breastfeeding rates within their own patient population.

Research indicates that children who were breastfed have lower incidences of overweight or obesity. For additional information, please click the link below to review the article in the March 2007 IHS Primary Care Provider.

www.ihs.gov/PublicInfo/Publications/HealthProvider/issues/PROV0307.pdf

How is this data used? It is used in the CRS Breastfeeding Rates topic in several measures that report:

1. How many patients approximately 2 months through 1 year of age were ever screened for infant feeding choice.
2. How many patients were screened at the approximate ages of 2 months, 6 months, 9 months, and 1 year.
3. How many patients who were screened were either exclusively or mostly breastfed at those age ranges.

Users may run the CRS Selected Measures (Local) Reports to view all of the breastfeeding performance measures. The report also provides the option to include a list of patients and identifies the dates and ages they were screened and their infant feeding choice values. Go to the link below to learn how to run this report in CRS, starting on page 206 (as numbered in the document itself, not in Adobe).

www.ihs.gov/misc/links_gateway/download.cfm?doc_id=10716&app_dir_id=4&doc_file=bgp_070u.pdf

Is Infant Feeding Choice data the same as the data included in the Birth Measurements section of the EHR and with the PIF (Infant Feeding Patient Data) mnemonic in PCC? No, it is different. The information collected in these sections are intended for one-time collection of birth weight, birth order, age when formula was started, breastfeeding was stopped and solid foods started, and linking to mother/guardian. Shown below is a screen shot of this section from EHR. While this information is important, none of it is used in the logic for the CRS Breastfeeding Rates measure; only the Infant Feeding Choice data is used.

What are the definitions for the Infant Feeding Choices? The definitions are shown below and are the same definitions used in both EHR and PCC.

- Exclusive Breastfeeding: Formula supplementing less than 3 times per week (<3x per week)
- Mostly Breastfeeding: Formula supplementing 3 or more times per week (>3x per week) but otherwise mostly breastfeeding
- ½ Breastfeeding, ½ Formula Feeding: Half the time breastfeeding, half the time formula feeding
- Mostly Formula: The baby is mostly formula fed, but breastfeeds at least once a week
- Formula Only: Baby receives only formula

Who should be collecting this information and how often? It depends on how your facility is set up but any provider can collect this information. At a minimum, all providers in Well Child and Pediatric clinics should be collecting this information for patients 45-394 days old at all visits occurring during that age range. Public Health Nurses should also be collecting this information. This data can be entered in EHR or PCC/PCC+, as described below.

ENTERING INFANT FEEDING CHOICE DATA IN EHR

In which version of EHR is Infant Feeding Choice data able to be entered? EHR Version 1.1, which was deployed nationally on October 3, 2007.

How do I enter Infant Feeding Choice in EHR?

1. After you have selected the patient and the visit, go to the Personal Health section. For some EHR sites, this may be included on the Wellness tab.
2. From the Personal Health dropdown list, select Infant Feeding, then click the Add button.

NOTE: The age of the patient must be five years or less to be able to select Infant Feeding; otherwise, Infant Feeding will not be listed in the dropdown list.

3. At the Add Infant Feeding Record window, click the appropriate checkbox to select the type of infant feeding, and then click the OK button to save the value.
4. The patient's value for Infant Feeding Choice for this visit is now displayed in the Personal Health section, as shown below.

ENTERING INFANT FEEDING CHOICE DATA IN PCC/PCC+

Which data entry patch do I need? You will need to have data entry patch 8 (apcd0200.08k) installed, which was released on October 19, 2005.

How do I enter Infant Feeding Choice in PCC?

1. Create a new visit or select an existing visit to append.At the Mnemonic prompt, type "IF" (Infant Feeding Choices) and press Enter.
2. Type the number corresponding to the type of feeding and press Enter. If you do not know the number, type "??" and press Enter to see a list of choices.
3. You are returned to the Mnemonic prompt. Continue with data entry of other items.

Stephanie Klepacki
CRS Project Manager/Lead Analyst

MCH Coordinator Editorial

The infant feeding choice functionality is supported in the newly released EHR 1.1

The clinical performance measure called Breastfeeding Rates reported

in the RPMS Clinical Reporting System (CRS) is a measure of interest. We wish to emphasize that while this measure is currently not a GPRA measure (one reported to Congress and OMB) it is used in support of the GPRA measure Childhood Weight Control with the goal of lowering the incidence of childhood obesity in the IHS patient population. Additionally, facilities can use this data to track infant feeding patterns and breastfeeding rates within their own patient population in the first year of life.

To capture this data Stephanie Klepacki, the CRS Project Manager/ Lead Analyst has developed: Frequently Asked Questions: Infant Feeding Choice in EHR. A team of analysts and clinicians have been involved in developing and testing this functionality. Kudos go to Phoenix Indian Medical Center's Department of Pediatrics, to Sherry Allison, Information Processing Supervisor and her staff for getting the data entered pre EHR, and the ever diligent and nurturing Suzan Murphy, RD, IBLCE who have done the lion's share of the clinical testing.

From an MCH standpoint expanding this functionality into toddler and early childhood feeding choices seems a natural next step as later versions are developed.

We look forward to your feedback, comments and use of this functionality in the universal documentation of feeding choice during the first year of life for our American Indian and Alaska Native families.

Lastly, new to the Indian Health Breastfeeding page* is the Lactation Support in the Workplace Toolkit. This document includes information on: how to get started, drafting local policy, evaluation tools, resources available on the Indian Health Breastfeeding page, as well as FAQs.

Lactation Support Policy in the Workplace
http://www.ihs.gov/MedicalPrograms/MCH/M/bf.cfm

***Indian Health Breastfeeding page**
http://www.ihs.gov/MedicalPrograms/MCH/M/bf.cfm

Medical Mystery Tour

What is the presenting part?

A 20 year old gravida 4 para 1,0,2,1 presented at 40 2/7 weeks in active labor. The patient had had a 39 pound weight gain throughout her otherwise unremarkable prenatal care. The patient's obstetric history was significant for one previous vaginal delivery of a term 9 pound 15 ounce infant. Laboratory testing was essentially unremarkable. On admission the patient's exam was cephalic presentation, 4 cm dilation, -1 station. The cervix was soft and in a mid position. External fetal monitoring was reassuring. Sixty second contractions were noted every 5 minutes.

At 01:30 the CNM noted that patient had progressed nicely in labor to 7 cm dilated and 100% effaced. The presenting part was still at -1 station. The membranes were intact. The CNM was unable to completely identify the presenting part. The FHR tracing was reassuring. The CNM noted that a suture line and fontanelle were palpable, but other tissue may have been present. The MD on call was asked to perform a bedside ultrasound to confirm the presenting part.

The bedside ultrasound confirmed a cephalic presentation which was slightly oblique. The physician proceeded to perform a digital exam.

What did the physician find on digital exam?

Stay tuned till next issue to learn the rest of the story

Trivia fact from Abstract of the Month

What is another classic line from the Pirates of the Caribbean: The Curse of the Black Pearl, beside the Rule of Parlay line?

Commodore Norrington (Jack Davenport), an officer in the Royal Navy who is in love with Elizabeth Swann (Keira Knightley), also has a deep-seated dislike for pirates.

He mentions to Captain Jack Sparrow (Johnny Depp) that Sparrow is "the worst pirate I have ever heard of".

As Jack Sparrow runs fingers his less than hygeinic beard he retorts, "Ahh, but you have heard of me"

*If this is not amusing as presented here, then I suggest you consult Pirates of the Caribbean: The Curse of the Black Pearl, directly. (Needless to say, I have no financial conflict of interest.)

Pirates of the Caribbean: The Curse of the Black Pearl
http://en.wikipedia.org/wiki/Pirates_of_the_Caribbean:_The_Curse_of_the_Black_Pearl

Midwives Corner

Vaginal birth after cesarean (VBAC) in rural hospitals

Counterpoint: David Gahn, M.D.

At Hastings Indian Medical Center, the Ob/Gyn Department decided to stop offering VBAC's routinely. None of the physicians or midwives is "anti-TOLAC/VBAC" but we considered several factors:

1) Our anesthesia department refuses to participate in a management plan to facilitate VBAC despite any data we may present. If we request them to be in house during a VBAC, they will refuse. Then I have to document in the chart that I requested anesthesia and they would not come in. That is a terrible way to do business. Our anesthesia department does provide excellent care to our laboring patients and are pros at emergent cesarean deliveries. They are skilled professionals, but the department is not staffed well enough to provide a CRNA or anesthesiologist dedicated solely to L&D.
2) Even though our Med Staff Rules and Regulations require on call personnel to able to present themselves within 20 minutes, this is not reliable. Also, we have only one OR crew and only one anesthesia person available in the evening. We have a protocol for an emergency c/s when the OR crew is already operating, but nothing is workable to do a cesarean hysterectomy with no anesthesia or OR crew. If you have ever done an emergent c/s under local with a CNM and an L&D nurse, you will appreciate this.
3) We also considered the local standard of practice. The one insurance company that covers physicians in the entire state of Oklahoma will not cover a physician who performs TOLAC/VBAC's. Therefore, there are no physicians other than federally employed physicians and Oklahoma University in Oklahoma City 3 hours away (they are self-insured) who will allow TOLAC. While this doesn't apply

Primary Care Discussion Forum

Ann Bullock
Cherokee, NC

Traditional AI/AN Medicine: Incorporating Into I/T/U Clincial Practice

December 3, 2007

Moderator:
Theresa Maresca, M.D.,
University of Washington School of Medicine

- What are the pros and cons of asking my patients about their traditional medicine use?
- How do I learn more about what traditional practices are common in my area?
- What specific strategies can be used to ask my patients diplomatically about their traditional medicine views?
- Where can I find resources about plant medicine?
- Is there a "right way" to work collaboratively with a traditional healer?
- What if I do not agree with my patient's views of traditional medicine?

Want to join the Primary Care Listserv? nmurphy@scf.cc

to the Federal Tort Claims Act, it does apply to the physician tort database, our licensing authorities, the physician's reputation, and the hospitals reputation. (Tort claims are printed in our local newspaper.)

4) In order for us to offer TOLAC, all 6 of our Ob/Gyn's need to be on board with the plan and they are not, mainly because anesthesia is not in house. There is data that supports VBAC without anesthesia present in the hospital, but you don't know our anesthesia department or how busy we are in the evenings.
5) Unfortunately, the national data on c/s rates is usually 2-3 years behind, and our hospital has matched those rates. We deliver about 975 babies per year, and our c/s rate to date for CY 2007 is 37%. Should we be ashamed of the number or proud of the good outcomes? The balance between risks and benefits in this regard in tenuous.
6) I propose that every time a healthy mom walks out of the hospital with a healthy baby, we have succeeded in our mission. Is our cesarean delivery rate too high? Until I see the definition of "too high", I'll argue with you. I disagree with the argument that our rate is what it is because we take care of higher risk patients. I don't think that is a reason. We do have a high teen pregnancy rate, diabetes, massive obesity, hypertension, etc., but we haven't studied it that closely. We would love to decrease the c/s rate, but obstetrics is a treacherous business and each physician is held responsible for the health of patients, mom and baby. We have to face reality – if a patient does not have a perfect baby, the physician will suffer a tort claim. (And I do mean suffer.)
7) We can't and don't force women to have repeat cesarean deliveries, for that would be assault. We do recommend a repeat cesarean delivery and tell patients of our policy. We occasionally have a patient that refuses a recommended c/s (breech, previous c/s, macrosomia, history of shoulder dystocia with permanent injury) and we have them sign a consent form and take care of her very well. This is all well within the standard of care.

On a similar topic, we don't offer women elective primary cesarean delivery even if the patient should decide this is her preferred method of delivery. In this case, we do refuse to allow women to give birth the way they choose.

8) When we did offer TOLAC, we had about 2 per year. We take this to mean that the others, after being counseled by a physician, opted for repeat c/s. Considering this, our c/s rate would not appreciably change if we offered VBACs.
9) Please don't condemn us for a policy that does not recommend VBAC's. Recognize that the data and ACOG support both options, and also recognize that the data has to be applied to the hospital. Because of the number of deliveries we perform, we have reliable data on post-operative infections (half the national average), TTN, transfusions, IUFD's, etc. Also know that we have excellent collaboration between our 6 physicians, 7 midwives, and 1 nurse practitioner. We don't make policies like this lightly and we examine the data carefully and applied it to our current practice.

So the bottom line is we might be more aggressive with TOLAC/VBACs if we had additional support. None of the physicians in our department are concerned with our cesarean delivery rate. One quote I heard is, "My cesarean delivery rate is 100% for everyone who needs a cesarean delivery." While this a bit crass, it is germane - the decision to perform a c/s rests solely with the physician charged with the care of the patient and the patient. I would love for our cesarean delivery rate to be 15%, but not at the expensive of a single injured child or mother. I fully support TOLAC in the right environment. That environment does not exist at Hastings Indian Medical Center.

David.Gahn@ihs.gov

Do you have a different opinion?

If so, please share it with me by December 10th and we will continue this point/counterpoint discussion in the next issue. nmurphy@scf.cc

In the meantime the first 5 articles in the Obstetrics Section, above, reveal a few of the advantages/disadvantages to vaginal after cesarean and cesarean delivery.

Navajo News

Jean Howe, Chinle

Which caused more deaths in the United States in 2005, MRSA or HIV?

A JAMA article estimating rates of invasive Methicillin Resistant Staphylococcus Aureus (MRSA) associated death rates in the United States, as well as several widely publicized deaths of children and adolescents from invasive MRSA and subsequent school closures, have brought new attention to the increasingly widespread problem of antibiotic resistance. The JAMA article, by Klevens et al., uses active population-based surveillance data from 7/04 through 12/05 from nine sites in the United States to estimate national rates of invasive MRSA in 2005. The sites, ranging in size from the state of Connecticut to Ramsey County, Minnesota,

also included several metropolitan areas. One site (Baltimore) had exceptionally high rates and this outlier data was excluded from the final analysis. The majority of the 8987 cases identified were health care associated, with 58.4% of health care associated cases having a community onset and 26.6% having a hospital onset. Another 13.7% of the cases were not linked to health care and 1.3% could not be identified as conclusively hospital or community associated. 1598 in-hospital deaths of patients with invasive MRSA were recorded. The overall rate of invasive infection was 31.8/100,000 and the mortality rate 6.3 per 100,000. The highest rates of invasive infection were noted in those over 65 years old, African Americans, and males.

Using this standardized rate of 31.8 per 100,000 for invasive MRSA, the authors estimate that the national burden invasive MRSA infection was 94,360 cases in 2005 with 18,650 associated deaths. As an accompanying editorial by Bancroft points out, if this projection is accurate, these deaths would exceed the total number of deaths attributable to HIV/AIDS in the United States in 2005. The editorial also points to several effective interventions that would decrease spread of these pathogens but are imperfectly implemented. These include thorough hand washing, careful use of antibiotics, limiting invasive devices, decolonization, and environmental cleaning. Clearly we can all do more to control the spread of this pathogen and limit the ongoing development of antibiotic resistance. A patient education sheet was also included in the same issue.

MRSA infections of the skin and soft tissue have become a widespread problem across the United States and have become quite common in many Native American communities. For example, at the Annual Navajo Area Women's Health Provider Meeting in September, Dr. Iralu, the Infectious Disease Consultant for Navajo Area, discussed the fact that fully 50% of staph isolates in Navajo Area are methcillin-resistant, leaving only a few drugs that are effective for treatment when antibiotics are needed. Incision and drainage is the foundation of management of local infections suspicious for MRSA and cultures should be collected to guide further treatment and for ongoing surveillance. Bactrim is one of the few oral antibiotics still widely effective for MRSA skin and soft-tissue infections; and Vancomycin is often used to treat invasive disease.

For non-invasive disease, antibiotics are not always necessary and incision and drainage with local wound care is often sufficient for treatment. The proper technique for incision and drainage is reviewed in the latest installment of the "Videos in Clinical Medicine" series from the New England Journal of Medicine. This useful resource also includes such topics as "Orotracheal Intubation", "Basic Laceration Repair", and "Pelvic Examination" with new videos being added periodically. These videos can be accessed from the NIH library web site with the access codes available to IHS employees from the librarian, Diane Cooper. Simply follow the online journal link to the New England Journal of Medicine and look for the "Procedure Videos" link on the NEJM home page.

Oh, and don't forget to wash your hands!

References: Online

Oklahoma Perspective

Greggory Woitte, Hastings Indian Medical Center

Methicillin-resistant Staphylococcus aureus in women's health

Methicillin-resistant Staphylococcus aureus (MRSA) has become a hot topic in the media recently. In October, the CDC released a report that there was 18,650 deaths from MRSA in 2005. This was more than the number of deaths due to AIDS in the same year. MRSA has been a well known superbug in Hospitals for years. MRSA has been a growing problem due to its resistance to many common antibiotics including beta lactam antibiotics including methicillin. While most invansive MRSA infections can still be traced to hospital exposure, approximately 15% of invasive infections are occurring in individuals with no known health care risk. These infections are primarily occurring in people over the age of 65 and 2/3 of infections that can be traced back to a health care exposure occur in patients that are no longer hospitalized.

As I am sitting her writing this and watching the football game, a report came on the TV about two High School students who are recovering from the Superbug. What can we as women's health providers do? Start with the basics that we learned in medical school. Wash your hands, Wash your hands, Wash your hands. The use of appropriate hand washing or the use of alcohol based rubs have been shown to decrease hospital infections, but compliance rates are rarely 100%. Next, use the right antibiotic for the appropriate infection. The days of shot gunning antibiotics can no longer be tolerated. The use of prophylactic antibiotics for surgeries or obstetrical procedures should comply with ACOG recommendations.

Even with diligent hand washing, and appropri-

Nurses Corner

Sandra Haldane, HQE

2008 LONG TERM TRAINING—NURSE ANESTHESIA—Apply Soon

To All IHS Nurse Commissioned Officers

The Indian Health Service (IHS) Headquarters Division of Nursing (DNS), Rockville, Maryland, will sponsor one (1) Nurse Commissioned Officers in 30 months of Long-Term Training (LTT) in Nurse Anesthesia to begin in June 2008 at the Uniformed Services University of Health Sciences (USUHS) in Bethesda, MD. Nurse Anesthesia Students will complete Phase I, 12 months of didactic, at USUHS in Bethesda, MD, followed by Phase II, 18 months of clinical, at the Alaska Native Medical Center (ANMC) in Anchorage, AK. Sandra.Haldane@ihs.gov

ate use of antibiotics, there will still be MRSA infections. Here at Hastings Indian Medical Center, we are fortunate to have Dr. Greg Felzien, a board certified Infectious Disease specialist, however I have included a list of treatment recommendations that was July 2006 ACOG Green Journal and reprinted from The Medical Letter for community acquired MRSA infections. In addition, a high index of suspicion is important, culture all wounds that open or that you opened. This includes all seromas, hematomas, as well as all obvious infected wounds.

References: Online

Perinatology Picks

George Gilson, MFM, ANMC

A cost decision analysis of 4 tocolytic drugs

CONCLUSION: If one elects a tocolytic, both nifedipine and indomethacin should be the agents of choice, based on a cost decision analysis.

Hayes E, et al A cost decision analysis of 4 tocolytic drugs. Am J Obstet Gynecol. 2007 Oct;197(4):383.e1-6.

STD Corner

Lori de Ravello, National IHS STD Program

Special issue of the American Journal of Obstetrics & Gynecology

I wanted to draw some attention to the special issue of the American Journal of Obstetrics & Gynecology which focused on Achievements, Issues, and Challenges: Prevention of Mother-to-Child HIV Transmission in the United States and in Resource-Limited Settings. Many of these articles should be of interest.

References: Online

Racial Disparities Persist Across All Reportable STDs

Racial and ethnic minorities continue to be disproportionately affected by sexually transmitted diseases in the United States; data in CDC's 2006 STD Surveillance Report show higher rates of all STDs among minority racial and ethnic populations when compared to whites, with the exception of Asians/Pacific Islanders. These disparities may be, in part, because racial and ethnic minorities are more likely to seek care in public health clinics that report STDs more completely than private providers. However, this reporting bias does not fully explain these differences. Other contributing factors include limited access to quality health care, poverty, and higher prevalence of disease in these populations. http://www.cdc.gov/std/stats/default.htm

Alaska State Diabetes Program

Barbara Stillwater

Hypertension Triples Women's Risk for Diabetes

The link between high blood pressure and diabetes risk was independent of factors known to increase the odds of getting diabetes and cardiovascular disease."

Conclusion Baseline BP and BP progression are strong and independent predictors of incident type 2 diabetes among initially healthy women.

Conen D et al Blood pressure and risk of developing type 2 diabetes mellitus: The Women's Health Study. Eur Heart J. 2007 Oct 9

Women's Health Headlines

Carolyn Aoyama, HQE

Alaska Native Fetal Alcohol Spectrum Disorders and Suicidality in a Healthcare setting

Objectives: To present a clinical case report and provide a review of the available literature on fetal alcohol syndrome and the fetal alcohol spectrum disorders and suicidality to highlight important implications for providers.

Study design: A case report and literature review.

Results: Almost 6% of adolescents evaluated by the fetal alcohol spectrum disorders diagnostic clinic at the Alaska Native Medical Center had been seen for self-harm related consultation.

Conclusions: Persons with the fetal alcohol syndrome and the fetal alcohol spectrum disorders, as a result of their disability, demonstrate characteristics or features that are commonly thought to be risk factors for suicide—such as mental illness, alcohol and other drug abuse, impulsivity, history of trauma or abuse, and employment and relationship/social difficulties. These persons may experience mental health problems, including suicidal ideation and attempts, over the course of their life times.

Fetal Alcohol Spectrum Disorders and Suicidality in a Healthcare setting, Baldwin MR Int J Circumpolar Health 2007; 66(Suppl 1):54-60

ACNM and AWHONN

nursing representation to site visit and educational activities involving women's health

I want to let you know that Indian Health Service now has a representative from the American College of Nurse Midwives (ACNM) and the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) representing the interests of nurse-midwives, labor and delivery nurses, women's health and neonatal nurses on the annual site visits to facilities providing perinatal services, and to the annual OB-GYN, Neonatal and Women's Health Course.

Marilyn Pierce-Bulger, CNM is our representative from ACNM. Marilyn practiced midwifery and was Chief of Midwifery at the Alaska Native Medical Center from 1981 in to the 1990's. Marilyn was not only involved in building the midwifery practice at ANMC, she also worked to reduce the infant mortality rate in Alaska through a program she developed to provide close case management through public health nursing to the mothers at highest risk of loosing their infant. She has also worked with the State of Alaska and CDC on various other health issues such as FASD and SIDS.

Karen Peddicord, RN, MSN is our representative from AWHONN. Karen spent her career as a labor and delivery nurse, OB Nurse Manager, a Professor of Nursing and the OB-Neonatal Product Manager for a large hospital here in the DC area. Karen has been the Acting CEO for AWHONN and is currently the Director of Research for AWHONN. Karen has always loved labor and delivery nursing. She often cites the heroism that L&D nurses display as just a routine part of their job.

Marilyn and Karen are part of the Post Graduate Course in OB, Neonatal and Women's Health; the so-called Denver Course. They both participate in the planning committee meetings. Karen will make a presentation on 'Creating a Nurse-Friendly Culture' and 'Creating a Culture of Safety within Labor and Delivery'. Karen will also be a part of the yearly site visits to IHS facilities providing OB services and will be focusing on nursing related issues. Marilyn is also part of the planning process for the OB, Neonatal and Women's Health Course. She will be making a presentation on FASD at the course. Marilyn also will participate in the site visits and will focus on midwifery. She knows many of the issues that midwives must deal with, such as the following:

1) CNM roles in various sites differ but are almost always KEY to the provision of a large percentage of health care to Native women, however the CNM voice is not always 'at the table' for planning/program development purposes. In addition, some sites do not have a sense of a 'CNM team' or of the larger 'OB team' which would benefit both women being served and the CNM's themselves.
2) The CNM role in some locations is being supervised (and/or performance reviews are done) by non-CNM providers. Perhaps encouragement and training/technical assistance could be provided to sites that desire an enhanced understanding of the CNM role. In other words if the org charts can't change, maybe the 'reviewers' can be trained to do a more informed review.

IHS conducts site visits in one Area each year. This year we will be going to Phoenix. I am interested in improving the nursing and nurse-midwifery content of those reviews. I believe that we are moving in the right direction. I will continue to work towards having adequate midwifery and perinatal/L&D nursing on each of the site visit teams.

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(30 minute rule…, continued from page 1)

agrees not to harm his new prisoner, but in one of the better lines in the movie he seeks to clarify that "the Rule of Parley is really more of a *GUIDELINE*." when it comes to the actual details of implementation.

This classic line* intimates that institutionalized 'double speak' may have been with us for centuries, and not invented during the recent era of Dilbert like office cubicles. Though we can all empathize with Ms. Swann's predicament, in much the same way some institutions and providers have misconstrued ACOG's efforts.

On the other hand, ACOG has sought to educate its members, other providers, and their facilities that a prompt systematic response needs to be immediately available when intrapartum, or other obstetric emergencies arise. The 30 minute rule is not a requirement, it really more of a guiding principle for appropriate prompt action.

In those cases of successful intrauterine resuscitation, a longer decision to incision interval, or no cesarean delivery at all, may be appropriate, though all the necessary resources should be on standby in the interim

The '17 minute rule'

In some cases, the clinical situation may require an immediate delivery, or more precisely a delivery within 17 minutes.

One study looking at this question comes from U.S.C.- Los Angeles County Medical Center, where, until the recent past, over 15,000 deliveries a year were attended, the majority occurring to women recently immigrated from Mexico with very little in the way of past obstetric records. Leung et al reported in October 1993 that the clinical signs of actual uterine rupture were not those classically described in the textbooks. Excessive pain and vaginal bleeding were seen in less than 15% of the cases, loss of the uterine pressure tracing in none, and recession of the presenting part in only 6%.

Of greatest predictive value were fetal heart rate abnormalities, usually repetitive lates and/or variables, which were found in 78% of the cases. There was one maternal death and 6 perinatal deaths; 6 other infants survived with severe neurologic damage.

All the infants that died were extruded from the uterus into the abdominal cavity, and—of special clinical significance—all the deaths, and all the neurologic injuries, occurred if the time from suspicion of rupture to delivery exceeded 17 minutes.

Periodic Obstetric Emergencies Drills

In any case, each institution should perform periodic drills to streamline their maternity team's prompt response to obstetric emergencies. A stellar example of obstetric emergency drills is available at Phoenix Indian Medical Center (PIMC).

Inspired by Dr. Michelle Lauria's presentation at the 2004 Native Women's Health and MCH Conference entitled 'Emergency Delivery Simulations: How to Develop Teamwork', PIMC began a successful organized approach to obstetric emergencies. The PIMC experience with emergency drills was subsequently reported at the 2007 version of the same conference by Karen Carey CNM and Tami McBride CNM MS. Lecture notes available. See Frequently Asked Questions below.

References: Online

***Another classic line from Curse of the Black Pearl is noted in the Medical Mystery Tour, page 11**

SAVE THE DATES

2007 National HIV Prevention Conference

- December 2–5, 2007
- Atlanta, GA
- Center for Disease Control and Prevention
- www.2007nhpc.org/conferenceinfo.asp

2008 National Conference of State Breastfeeding Coalitions

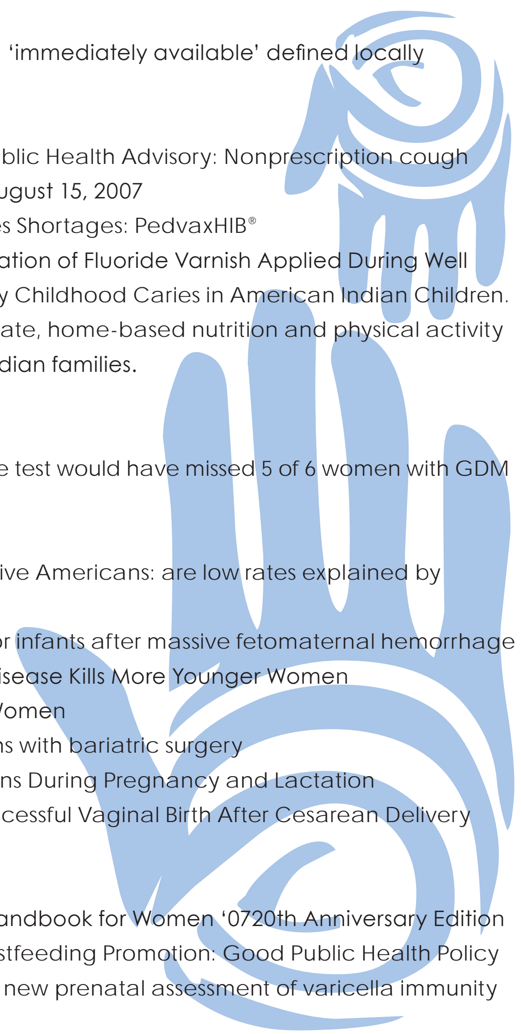
- January 26–28, 2008
- Arlington, VA.
- United States Breastfeeding Committee
- http://usbreastfeeding.org

23nd Annual Midwinter Indian Health OB/PEDS Conference

- February 8–10, 2008
- For providers caring for Native women and children
- Telluride, CO
- Contact AWaxman@salud.unm.edu

Keeping Native Women & Families Healthy & Strong

- April 23–25, 2008
- Milwaukee, WI
- Great Lakes Tribal Epidemiology Center
- Contact EpidemiologyCenter@gmail.com



Abstract of the Month

- 30 minute rule not a requirement and 'immediately available' defined locally

IHS Child Health Notes

- U.S. Food and Drug Administration Public Health Advisory: Nonprescription cough and cold medicine use in children. August 15, 2007
- Infectious Disease Updates—Vaccines Shortages: PedvaxHIB®
- An Observational Study of the Association of Fluoride Varnish Applied During Well Child Visits and the Prevention of Early Childhood Caries in American Indian Children.
- Development of a culturally appropriate, home-based nutrition and physical activity curriculum for Wisconsin American Indian families.

From Your Colleagues

- Burt Attico, Phoenix—Random glucose test would have missed 5 of 6 women with GDM

Hot Topics

- Obstetrics—Cesarean delivery in Native Americans: are low rates explained by practice style?
- Child Health—Long-term prognosis for infants after massive fetomaternal hemorrhage
- Chronic disease and Illness—Heart Disease Kills More Younger Women
- Low-Carbohydrate Diet Effective in Women
- High suicide and heart disease deaths with bariatric surgery
- ACOG—Use of Psychiatric Medications During Pregnancy and Lactation
- AFP—Predicting the Likelihood of Successful Vaginal Birth After Cesarean Delivery

Features

- Ask a Librarian—The Healthy Heart Handbook for Women '0720th Anniversary Edition
- Breastfeeding—Getting it Right, Breastfeeding Promotion: Good Public Health Policy
- Featured Website—Lack of VZIG and new prenatal assessment of varicella immunity addressed: New module
- MCH Alert—Tightening the "holes" in the Swiss cheese model of patient safety in obstetrics
- MCH Headlines—Frequently Asked Questions about Infant Feeding Choice
- Medical Mystery Tour—What is the presenting part?

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