



Diabetes mellitus and birth defects

OBJECTIVE: The purpose of this study was to examine associations between diabetes mellitus and 39 birth defects.

STUDY DESIGN: This was a multicenter case-control study of mothers of infants who were born with (n = 13,030) and without (n = 4895) birth defects in the National Birth Defects Prevention Study (1997-2003).

RESULTS: Pregestational diabetes mellitus (PGDM) was associated significantly with non-cardiac defects (isolated, 7/23 defects; multiples, 13/23 defects) and cardiac defects (isolated, 11/16 defects; multiples, 8/16 defects). Adjusted odds ratios for PGDM and all isolated and multiple defects were 3.17 (95% CI, 2.20-4.99) and 8.62 (95% CI, 5.27-14.10), respectively. Gestational diabetes mellitus (GDM) was associated with fewer noncardiac defects (isolated, 3/23 defects; multiples, 3/23 defects) and cardiac defects (isolated, 3/16 defects; multiples, 2/16 defects). Odds ratios between GDM and all isolated and multiple defects were 1.42 (95% CI, 1.17-1.73) and 1.50 (95% CI, 1.13-2.00), respectively. These associations were limited generally to offspring of women with prepregnancy body mass index ≥ 25 kg/m².

CONCLUSION: PGDM was associated with a wide range of birth defects; GDM was associated with a limited group of birth defects.

Correa A, Gilboa SM, Besser LM, Botto LD, Moore CA, Hobbs CA, Cleves MA, Riehle-Colarusso TJ, Waller DK, Reece EA. Diabetes mellitus and birth defects. *Am J Obstet Gynecol*. 2008 Sep;199(3):237. e1-9. Epub 2008 Jul 31. <http://www.ncbi.nlm.nih.gov/pubmed/18674752>

OB/GYN CCC Editorial

The National Birth Defects Prevention Study is a population-based case-control study utilizing data from 10 United States birth defect surveillance

systems. The authors of this paper used data from this national surveillance program to examine the associations of pregestational diabetes mellitus (PGDM) and gestational diabetes (GDM) with a broad range of birth defects. The association of maternal obesity/BMI with birth defects was also assessed.

4895 controls and 13,030 cases were included in the final analysis. The prevalence of PGDM was 0.5% in the control subjects and 2.2% for the case subjects; the rates for GDM were 3.7% (controls) and 5.1% (cases). For those with PGDM, the association of diabetes with both isolated and multiple birth defects persisted, irrespective of BMI. In the setting of PGDM, the odds of an isolated anomaly increased by a factor of 3.2 and of multiple anomalies by 8.6. For those with gestational diabetes, an increased risk was noted only for those with a pre-pregnancy BMI >25 kg/m² (GDM odds ratio isolated defects = 1.4, multiple defects = 1.5).

The authors noted that PGDM was associated with approximately 50% of the birth defect categories that were analyzed. Particular associations were noted with central nervous system defects, limb deficiencies, renal agenesis, hypospadias, orofacial clefts, and heart defects.

Notably, this study does not include information on the degree of glucose control achieved by the mothers of the control and case infants. It is well-known that the risk of fetal anomalies increases with increasing glucose levels and that A1c levels early in pregnancy (during organogenesis) correlate with risks of both miscarriage and fetal anomaly. This study is important because it quantifies the increased risk for those with PGDM and also confirms that GDM in the setting of maternal obesity is associated with a modest increase in risk as well.

This information highlights the need to identify pre-conceptually women with potential glucose control problems and assist them in achieving optimal control prior to pregnancy. Many women who have glucose intolerance or GDM in one preg-

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“Many Voices into One Song”

Did you attend the Albuquerque Women's Health Conference in August 2007? Were you wondering when the next biennial meeting would be? This year we've moved things up a bit to take advantage of an opportunity to partner with organizations working in Indigenous Women's Health and Child Health around the globe. For more details, please see p. 4.

Albuquerque, NM
Women's Health March 4-6, 2009
Children's Health March 6-8, 2009

(The 6th is an overlap day with both groups participating!)

Hope to see you there!

Also on-line....

Subscribe to the listserv and receive reminders about this service. If you have any questions, please contact me at jean.howe@ihs.gov

Jean Howe, MD, MPH
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."

—Chinese Proverb

Quote of the month

The function of the imagination is not to make strange things settled, so much as to make settled things strange.

—G.K. Chesterton

Article of Interest

Universal screening for hearing loss in newborns: US Preventive Services Task Force

Pediatrics. 2008 Jul;122(1):143-8.

The USPSTF recommends screening for hearing loss in all newborn infants stating that there is a high certainty that the net benefit is moderate to substantial. This follows on the recommendations of the Joint Committee on Infant Hearing that first recommended newborn hearing screening in 2000.

It is estimated that 1-3/1,000 live born infants have significant congenital hearing loss. Previous efforts with targeted screening of high-risk newborns missed over 50% of affected infants leading to the new recommendation for universal screening. Most programs involve a two-step process in which the first screen is an otoacoustic emission test and follow-up is done by auditory brainstem response. This procedure yields a screening sensitivity of 0.92 and a specificity of 0.98

There is also substantial evidence that early identification and intervention of hearing loss before 6 months of age will result in marked benefits. Children that receive timely intervention services perform 20-40 percentile points higher in vocabulary, social adjustment and behavior at 8 years of age. Intervention can include augmentation devices, cochlear implants or acquisition of sign language.

Editorial Comment

Since the first recommendation in 2000 that infants be screened for hearing loss the percentage of infants screened at birth has increased from 38% up to 95%. However, almost half of children who fail their first screen do not receive appropriate or timely follow-up care. Ensuring that all infants receive timely intervention is now our greatest challenge in newborn hearing screening. Reviewing the results of newborn hearing screening should be a part of the two week and six week well child care visit.

Recent literature on American Indian/ Alaskan Native Health

Michael L. Bartholomew, MD

A Longitudinal Study of a Pediatric Practice-based Versus an Agency-Based Model of Care Coordination for Children and Youth with Special Health Care Needs.

Wood D, Winterbauer N, Sloyer P, Jobli E, Hou T, McCaskill Q, Livingood WC. *Matern Child Health J.* 2008

Children with Special Health Care Needs (CSHCN) is defined as “those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amounts beyond that required by children generally.”¹ Recent estimates indicate that CSHCN account for approximately 14% of all U.S. children (10.2 million) and roughly 70% of all health care expenditures.^{1,2} The American Academy of Pediatrics defines the characteristics of the medical home as a primary care delivery model that is “accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective.”³ Care coordination, as a part of the medical home model, has been proven to be a vital piece of any integrated health services system for CSHCN. Positive outcomes such as patient satisfaction, reduced health care costs, reduced delay in care, and fewer hospitalizations have all been shown to be related to care coordination and the medical home model. ¹ In 2008, Robert McSwain, Director of the Indian Health Service, included the development of a “medical home” in his vision statement for improving the health care for patients.⁴ Currently, tribal clinics and service units are advancing towards care coordination and the establishment of a medical home.

This prospective cohort study compares agency-based care coordination with practice-based models for CSHCN. Three pediatric practices that utilize an agency based model of care coordination were compared to three practices that utilize nurse care coordination and received medical home training. Families of CSHCN were monitored over 18 months through base-line and follow-up surveys. Families rated four care coordination measures: 1.) Help with needed services 2.) Support from the care coordinator 3.) Satisfaction with care coordination services 4.) Barriers to getting health services. Additionally, parents rated of pediatric services including treatment by the office staff, communication with the pediatrician, partnering in decision-making, and connecting to outside resources. Parents with higher scale scores at follow-up than at baseline were classified as “improved” whereas scores lower or equal at follow-up were labeled as “not improved.”

Although practiced based care coordination showed no significant difference in mean change scores between baseline and follow-up for the four care coordination measures, it had higher percentages of “improved” scores than did the agency based model. Of the ratings of pediatric services, practice based care coordination had a higher percentage of “improved” in one measure (treatment by office staff), while the percentages in the remaining measures were similar.

Despite the studies limitations (transient target population, lack of randomization, and combination of the medical home training and practice based care coordination in the participating practices possibly influencing favorable responses), the authors conclude that practice base care coordination leads to increased family satisfaction in the quality of care and the reduction of barriers to care for CSHCN.

References:

1. American Academy of Pediatrics. (2005). *Care Coordination in the Medical Home: Integrating Health and Related Systems of Care for Children With Special Health Care Needs. Policy Statement. Pediatrics, 116, 1238-1244.*
2. American Academy of Pediatrics. (2002). *The Medical Home. Policy Statement. Pediatrics, 110, 184-186.*
3. American Academy of Pediatrics. *The National Center of Medical Home Initiatives for Children With Special Health Care Needs. <http://www.medicalhomeinfo.org/index.html>*
4. Robert G. McSwain, Indian Health Service Director. *Vision for The Indian Healthcare System.*

From Your Colleagues

Jean Howe, CCC, Ob/Gyn “Many Voices into One Song”

Planning continues for the First International Meeting on Indigenous Women’s Health; Third International Meeting on Indigenous Child Health, to be held in March 2009 in Albuquerque. For those of us working in the field of women’s health care and serving primarily American Indian and Alaska Native women, this represents the next in a series of biennial meetings and follows on the heels of the highly successful August 2007 conference. This meeting is happening a mere 18 months after that conference because we were given the opportunity to partner with both our Canadian colleagues working in the fields of First Nations, Inuit, and Métis women’s health care and with our Pediatric colleagues from both countries. Many wonderful speakers, panel discussions, and breakout sessions are planned addressing issues from across the spectrum of indigenous women’s health and child health in both countries. Each site will also be given the opportunity to present their projects and successes in a poster session planned for the first evening of the conference. Please do join us for this exciting event!

Albuquerque, NM

Women’s Health March 4-6, 2009

Children’s Health March 6-8, 2009

(The 6th is an overlap day with both groups participating!)

Robert McSwain, IHS Director

Susan V. Karol, MD, named IHS Chief Medical Officer

I am pleased to announce that Susan V. Karol, M.D., a member of the Tuscarora Indian Nation, is appointed as the Chief Medical Officer (CMO) of the Indian Health Service (IHS), effective September 19. Dr. Karol served from 1988-1990 as a Lieutenant Commander in the United States Public Health Service while holding the position of Chief of Surgery and Anesthesia at the Shiprock Indian Hospital, Shiprock, New Mexico.

Dr. Karol comes to the IHS from the Essex Surgical Associates, PC, in Beverly, Massachusetts, where she has worked since 2004. From 1991 to 2003, she worked at Beverly Surgical Associates, Inc. From 1991 to the present, Dr. Karol also has served as the Medical Director of The Hunt Breast Center, Hunt Hospital, Danvers, Massachusetts, and as an active staff member of the Beverly Hospital. From 1996 to the present, she has served as Chief of Surgery at the Beverly Hospital. Her other appointments include serving as an assistant Professor of Surgery at Tufts Medical School from 1994 to the present; Trustee of the Northeast Health Systems, Inc., Beverly Hospital; and as Assistant Medical Director of Specialty Care of the New England Community Medical Group.

Dr. Karol graduated Dartmouth College with an A.B. in biology and received her M.D. from the Medical College of Wisconsin. Her post doctoral training includes work as Clinical Fellow in Surgery at the Massachusetts General Hospital; Chief

Resident and General Surgery Residency, University of Massachusetts Medical Center Coordinated Surgical Program; General Surgery Resident, St. Mary’s Hospital and Medical Center; and Categorical Surgical Resident, University of Massachusetts Medical Center Coordinated Surgical Program.

As the IHS CMO, Dr. Karol will provide medical advice and guidance to the Office of the Director and staff on American Indian and Alaska Native health care policies and issues. She will serve as the primary liaison and advocate for IHS field clinical programs and community-based health professionals. Dr. Karol will also provide national and international health care leadership and representation for the agency. In addition, she will ensure that patient care and medical standards and concerns are represented in the decision-making process of the agency.

Sheila Warren, Headquarters

Joint Commission Resources is Challenging YOUR HOSPITAL to Increase Health Care Worker Vaccination against the Flu

Did you know that the current national average of health care workers who get vaccinated against the flu is only 42 percent? We cannot continue to vaccinate only a small percentage of caregivers against the flu when we know that according to the Centers for Disease Control and Prevention (CDC), in recent years, flu infections have been documented in hospitals and healthcare workers have been frequently implicated as the source of these infections.

In the name of patient safety, JCR is issuing a challenge to all hospitals to do a better job of vaccinating their doctors, nurses and ancillary workers against the flu. Hospitals that achieve a vaccination rate of 43 percent or more will be recognized for their dedication to helping keep their employees healthy and helping to protect their patients.

The Flu Vaccination Challenge begins September 1, 2008 and continues through the flu season to May 2009. Please take two minutes to register your hospital, note your current rate of vaccination, your goal and challenges.

Resources include a one page handout of 7 Myths and Realities about the Flu.

www.FluVaccinationChallenge.com

Hot Topics

Obstetrics

Electronic Fetal Monitoring: Update on Definitions and Interpretation

In April 2008, the Eunice Kennedy Shriver National Institute of Child Health and Human Development, the American College of Obstetricians and Gynecologists, and the Society for Maternal-Fetal Medicine partnered to sponsor a 2-day workshop to revisit nomenclature, interpretation, and research recommendations for intrapartum electronic fetal heart rate monitoring.

Participants included obstetric experts and representatives from relevant stakeholder groups and organizations. This article provides a summary of the discussions at the workshop. This includes a discussion of terminology and nomenclature for the description of fetal heart tracings and uterine contractions for use in clinical practice and research. A three-tier system for fetal heart rate tracing interpretation is also described. Lastly, prioritized topics for future research are provided.

Macones GA, Hankins GD, Spong CY, Hauth J, Moore T. The 2008 National Institute of Child Health and Human Development Workshop Report on Electronic Fetal Monitoring: Update on Definitions, Interpretation, and Research Guidelines. Obstet Gynecol. 2008 Sep;112(3):661-6.

Bariatric surgery linked to improved perinatal outcomes

OBJECTIVE: To compare the perinatal outcomes of women who delivered before with women who delivered after bariatric surgery.

METHODS: A retrospective study was undertaken to compare perinatal outcomes of women who delivered before with women who delivered after bariatric surgery in a tertiary medical center between 1988 and 2006. A multivariate logistic regression model was constructed to control for confounders.

RESULTS: During the study period, 301 deliveries preceded bariatric surgery and 507 followed surgery. A significant reduction in rates of diabetes mellitus (17.3% vs 11.0%; $P=0.009$), hypertensive disorders (23.6% vs 11.2%; $P<0.001$), and fetal macrosomia (7.6% vs 3.2%; $P=0.004$) were noted after bariatric surgery. Bariatric surgery was found to be independently associated with a reduction in diabetes mellitus (OR 0.42, 95% CI 0.26-0.67; $P<0.001$), hypertensive disorders (OR 0.38, 95% CI 0.25-0.59;

$P<0.001$), and fetal macrosomia (OR 0.45, 95% CI 0.21-0.94; $P=0.033$).

CONCLUSION: A decrease in maternal complications, such as diabetes mellitus and hypertensive disorders, as well as a decrease in the rate of fetal macrosomia is achieved following bariatric surgery.

Weintraub AY, Levy A, Levi I, Mazor M, Wiznitzer A, Sheiner E. Effect of bariatric surgery on pregnancy outcome. Int J Gynaecol Obstet. 2008 Sep 1. [Epub ahead of print]

Gynecology

Methicillin-resistant Staphylococcus aureus as a common cause of vulvar abscesses

OBJECTIVE: To estimate the incidence of methicillin-resistant Staphylococcus aureus (MRSA) among women with vulvar abscesses and to describe clinical factors associated with inpatient compared with outpatient treatment.

METHODS: We reviewed all women with a vulvar abscess who were treated with incision and drainage between October 2006 to March 2008. We reviewed the abscess cultures and evaluated clinical and laboratory variables associated with inpatient compared with outpatient treatment.

RESULTS: During the 80-week study period, 162 women were treated for a vulvar abscess. Methicillin-resistant S aureus was isolated from 85 of 133 (64%) cultured vulvar abscesses. No presenting signs or symptoms were more common among patients with MRSA abscesses. Women with an MRSA vulvar abscess were not more likely to require inpatient admission or experience treatment complications. Inpatient treatment occurred in 64 of 162 (40%) patients and was predicted by medical comorbidities: diabetes (45.3%, odds ratio [OR] 2.29, 95% confidence interval [CI] 1.12-4.72), hypertension (34.4%, OR 2.33, 95% CI 1.06-5.13), initial serum glucose greater than 200 (37.5%, OR 3.32, 95% CI 1.48-7.51), and signs of worse infection, i.e., larger abscesses (mean 5.2 cm) ($P<0.001$) and elevated white blood cell count of at least 12,000/mm³ (45.3%, OR 3.04, 95% CI 1.44-6.43).

CONCLUSION: Methicillin-resistant S aureus was the most common organism isolated from vulvar abscesses. Inpatient treatment is more com-

Domestic Violence

Break the Silence: Stop the Violence

It may shock you to know that one out of every eleven teens reports being hit or physically hurt by a boyfriend or girlfriend in the past twelve months. But why is that, and how can we change it? In "Break The Silence: Stop the Violence," parents talk with teens about developing healthy, respectful relationships before they start dating.

Source: National Center for Injury Prevention and Control (NCIPC)

Running Time: (4:12) Release Date: 8/4/2008

www.cdc.gov/CDCTV/BreakTheSilence/index.html

mon in women with medical comorbidities, larger abscesses, and signs of systemic illness. An antibiotic regimen with activity against MRSA, such as trimethoprim-sulfamethoxazole, should be considered in similar populations with vulvar abscesses.

Thurman AR, Satterfield TM, Soper DE. Methicillin-resistant Staphylococcus aureus as a common cause of vulvar abscesses. Obstet Gynecol. 2008 Sep;112(3):538-44. <http://www.ncbi.nlm.nih.gov/pubmed/18757650>

Frequently asked questions

Neil Murphy; SCF, ANMC

Q. Can a patient receive outpatient cervical ripening?

For a thorough answer see the on-line version of the CCC Corner at www.ihs.gov/MedicalPrograms/MCH/M/ob.cfm

Q. Can a patient receive outpatient cervical ripening? A. Yes, selected patients can receive outpatient cervical ripening with careful monitoring

Outpatient cervical ripening with low dose prostaglandins has been found to be a convenient, safe, cost- and time-saving procedure for women with a medical need for induction, but without an urgent need to be delivered. This process should be undertaken with care and forethought. It should not be undertaken unless there is an ongoing quality assurance system to maximize patient safety.

Child Health Ibuprofen more effective than acetaminophen for treating fever in children

OBJECTIVE: To investigate whether paracetamol (acetaminophen) plus ibuprofen are superior to either drug alone for increasing time without fever and the relief of fever associated discomfort in febrile children managed at home.

DESIGN: Individually randomised, blinded, three arm trial.

SETTING: Primary care and households in England.

PARTICIPANTS: Children aged between 6 months and 6 years with axillary temperatures of at least 37.8 degrees C and up to 41.0 degrees C.

INTERVENTION: Advice on physical measures to reduce temperature and the provision of, and advice to give, paracetamol plus ibuprofen, paracetamol alone, or ibuprofen alone.

MAIN OUTCOME MEASURES: Primary outcomes were the time without fever (<37.2 degrees C) in the first four hours after the first dose was given and the proportion of children reported as being normal on the discomfort scale at 48 hours. Secondary outcomes were time to first occurrence of normal temperature (fever clearance), time without fever over 24 hours, fever associated symptoms, and adverse effects.

RESULTS: On an intention to treat basis, paracetamol plus ibuprofen were superior to paracetamol for less time with fever in the first four hours (adjusted difference 55 minutes, 95% confidence interval 33 to 77; $P < 0.001$) and may have been as good as ibuprofen (16 minutes, -7 to 39; $P = 0.2$). For less time with fever over 24 hours, paracetamol plus ibuprofen were superior to paracetamol (4.4 hours,

2.4 to 6.3; $P < 0.001$) and to ibuprofen (2.5 hours, 0.6 to 4.4; $P = 0.008$). Combined therapy cleared fever 23 minutes (2 to 45; $P = 0.025$) faster than paracetamol alone but no faster than ibuprofen alone (-3 minutes, 18 to -24; $P = 0.8$). No benefit was found for discomfort or other symptoms, although power was low for these outcomes. Adverse effects did not differ between groups.

CONCLUSION: Parents, nurses, pharmacists, and doctors wanting to use medicines to supplement physical measures to maximise the time that children spend without fever should use ibuprofen first and consider the relative benefits and risks of using paracetamol plus ibuprofen over 24 hours.

Hay AD, Costelloe C, Redmond NM, Montgomery AA, Fletcher M, Hollinghurst S, Peters TJ. Paracetamol plus ibuprofen for the treatment of fever in children (PITCH): randomised controlled trial. BMJ. 2008 Sep 2;337:a1302. doi: 10.1136/bmj.a1302. <http://www.ncbi.nlm.nih.gov/pubmed/18765450>

Identifying postpartum depression: are 3 questions as good as 10?

BACKGROUND: Postpartum depression is the most common medical problem that new mothers face. Anxiety is a more prominent feature of postpartum depression than of depression that occurs at other times in life. Routine, universal screening significantly improves detection in primary health care settings. Thus, an ultrabrief scale that could be incorporated into a general health survey or interview would be useful.

OBJECTIVE: We tested the hypothesis that, during the first 6 postpartum months, the 3-item anxiety subscale of the Edinburgh Postpartum Depression Scale is a better ultrabrief depression screener than 2 Edinburgh Postpartum Depression Scale questions that are almost identical to the widely used Patient Health Questionnaire.

METHODS: A cohort of 199 14- to 26-year-old participants in an adolescent-oriented maternity program completed the Edinburgh Postpartum Depression Scale at well-child visits during the first 6 postpartum months. Three subscales of the Edinburgh Postpartum Depression Scale were examined as ultrabrief alternatives: the anxiety subscale (3 items; Edinburgh Postpartum Depression Scale-3), the depressive symptoms subscale (7 items; Edinburgh Postpartum Depression Scale-7), and 2 questions that resemble the Patient Health Questionnaire (Edinburgh Postpartum Depression Scale-2). The reliability, stability, and construct

validity of the Edinburgh Postpartum Depression Scale and 3 subscales were compared. Criterion validity was assessed by comparison with a score of ≥ 10 on the full, 10-item Edinburgh Postpartum Depression Scale. RESULTS: A total of 41 mothers (20.6%) met study criteria for referral for evaluation of depression (Edinburgh Postpartum Depression Scale-10 score ≥ 10). The Edinburgh Postpartum Depression Scale-3 exhibited the best screening performance characteristics, with sensitivity at 95% and negative predictive value at 98%. It identified 16% more mothers as depressed than the Edinburgh Postpartum Depression Scale did. The performance of the Edinburgh Postpartum Depression Scale-2 was markedly inferior, with sensitivity at 48% to 80%. Moreover, the Edinburgh Postpartum Depression Scale-2 was unreliable for mothers who had not been depressed in the past.

CONCLUSION: The brevity, reliability, and operating characteristics of the Edinburgh Postpartum Depression Scale-3 make it an attractive postpartum depression screening tool for primary health care settings in which the goal is to detect depression, not to assess its severity. Validation by diagnostic psychiatric interview is needed.

Kabir K, Sheeder J, Kelly LS. Identifying postpartum depression: are 3 questions as good as 10? Pediatrics. 2008 Sep;122(3):e696-702.

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Chronic disease and illness

Incidence and Risk Factors for Stroke in American Indians; The Strong Heart Study

BACKGROUND: There are few published data on the incidence of fatal and nonfatal stroke in American Indians. The aims of this observational study were to determine the incidence of stroke and to elucidate stroke risk factors among American Indians.

METHODS AND RESULTS: This report is based on 4549 participants aged 45 to 74 years at enrollment in the Strong Heart Study, the largest longitudinal, population-based study of cardiovascular disease and its risk factors in a diverse group of American Indians. At baseline examination in 1989 to 1992, 42 participants (age- and sex-adjusted prevalence proportion 1132/100 000, adjusted to the age and sex distribution of the US adult population in 1990) had prevalent stroke. Through December 2004, 306 (6.8%) of 4507 participants without prior stroke suffered a first stroke at a mean age of 66.5 years. The age- and sex-adjusted incidence was 679/100 000 person-years. Nonhemorrhagic

cerebral infarction occurred in 86% of participants with incident strokes; 14% had hemorrhagic stroke. The overall age-adjusted 30-day case-fatality rate from first stroke was 18%, with a 1-year case-fatality rate of 32%. Age, diastolic blood pressure, fasting glucose, hemoglobin A1c, smoking, albuminuria, hypertension, prehypertension, and diabetes mellitus were risk factors for incident stroke.

CONCLUSIONS: Compared with US white and black populations, American Indians have a higher incidence of stroke. The case-fatality rate for first stroke is also higher in American Indians than in the US white or black population in the same age range. Our findings suggest that blood pressure and glucose control and smoking avoidance may be important avenues for stroke prevention in this population.

Zhang Y, Galloway JM, Welty TK, Wiebers DO, Whisnant JP, Devereux RB, et al. Incidence and Risk Factors for Stroke in American Indians. The Strong Heart Study. Circulation. 2008 Sep 22. [Epub ahead of print]

Featured Website

Welcome to WIN

The Weight-control Information Network provides the general public, health professionals, the media, and Congress with up-to-date, science-based information on weight control, obesity, physical activity, and related nutritional issues.

www.win.niddk.nih.gov/index.htm

Features

ACOG American College of Obstetricians and Gynecologists ACOG Practice Bulletin No. 97: Fetal Lung Maturity Summary of Recommendations and Conclusions

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

- Testing for fetal lung maturity should not be performed, and is contraindicated, when delivery is mandated for fetal or maternal indications.
- Fetal pulmonary maturity should be confirmed before scheduled delivery at less than 39 weeks of gestation unless fetal maturity can be inferred from historic criteria.
- The probability of neonatal RDS is dependent on both the fetal lung maturity test result and the gestational age at which the fetal lung maturity test was performed.
- Fluorescence polarization assays (TDx FLM II) using a defined mature profile of 55 mg/g or greater is appropriate for the determination of risk of neonatal RDS in pregnancies of women with diabetes mellitus.
- Fetal lung maturity test results from amniotic fluid collected vaginally compared with those from fluid collected by transabdominal amniocentesis demonstrate that when results from fluid collected vaginally are mature, the results are reliable.
- Complications from third-trimester amniocentesis for fetal lung maturity are uncommon when performed with ultrasound guidance.

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

- In general, the same threshold values for fetal lung maturity tests that predict low risk of neonatal RDS in pregnancies of women who do not have diabetes mellitus apply to pregnancies of women who have diabetes mellitus, whether it is gestational diabetes mellitus or pregestational diabetes mellitus.
- Data suggest that amniocentesis of both twins be performed when the gestation is between 30 0/7 weeks and 32 6/7 weeks of gestation. Amniocentesis of one twin appears to be sufficient when gestation is greater than 32 6/7 weeks.
- Prior to elective delivery, fetal lung maturity testing in twins with well defined gestational ages at 38 0/7 weeks or greater may not be necessary.

Proposed Performance Measure

Documentation of discussion or performance of fetal lung maturity testing in elective cesarean deliveries at a gestation less than 39 0/7 weeks

American College of Obstetricians and Gynecologists. ACOG Practice Bulletin No. 97: fetal lung maturity. Obstet Gynecol. 2008 Sep;112(3):717-26. <http://www.ncbi.nlm.nih.gov/pubmed/18757686>

ACOG Committee Opinion No. 415: Depot Medroxyprogesterone Acetate and Bone Effects

ABSTRACT: Although depot medroxyprogesterone acetate (DMPA) is associated with bone mineral density (BMD) loss during use, current evidence suggests that partial or full recovery of BMD occurs at the spine and at least partial recovery occurs at the hip after discontinuation of DMPA. Given the efficacy of DMPA, particularly for populations such as adolescents for whom contraceptive adherence can be challenging or for those who feel they could not comply with a daily contraceptive method or a method that must be used with each act of intercourse, the possible adverse effects of DMPA must be balanced against the significant personal and public health impact of unintended pregnancy. Concerns regarding the effect of DMPA on BMD should neither prevent practitioners from prescribing DMPA nor limit its use to 2 consecutive years. Practitioners should not perform BMD monitoring solely in response to DMPA use because any observed short-term loss in BMD associated with DMPA use may be recovered and is unlikely to place a woman at risk of fracture during use or in later years.

American College of Obstetricians and Gynecologists. ACOG Committee Opinion No. 415: depot medroxyprogesterone acetate and bone effects. Obstet Gynecol. 2008 Sep;112(3):727-30.

ACOG Committee Opinion No. 416: The Uninsured

ABSTRACT: The United States is one of the few industrialized nations in the world that do not guarantee health care for their populations. Access to health care for all women is of paramount concern to obstetrician–gynecologists and the American College of Obstetricians and Gynecologists. Pregnant women and infants are among the most vulnerable populations in the United States and the American College of Obstetricians and Gynecologists believes that providing them with full insurance coverage and access to health care must be a primary step in the process of providing coverage for all individuals within the U.S. borders. Health care professionals can play a pivotal role in improving access to needed health care by helping society and our political representatives understand the importance of broadening health insurance coverage.

ACOG Committee Opinion No. 417: Addressing Health Risks of Noncoital Sexual Activity

ABSTRACT: Noncoital sexual behaviors, which include mutual masturbation, oral sex, and anal sex, are common expressions of human sexuality. Couples may engage in noncoital sexual activity instead of penile–vaginal intercourse hoping to reduce the risk of sexually transmitted diseases and unintended pregnancy. Although these behaviors carry little or no risk of pregnancy, women engaging in noncoital behaviors may be at risk of acquiring sexually transmitted diseases. Practitioners can assist by assessing patient risk and providing risk reduction

counseling for those participating in noncoital sexual activities. *American College of Obstetricians and Gynecologists. ACOG Committee Opinion No. 417: addressing health risks of noncoital sexual activity. Obstet Gynecol. 2008 Sep;112(3):735-7. http://www.ncbi.nlm.nih.gov/pubmed/18757689*

ACOG Committee Opinion No. 418: Prenatal and Perinatal Human Immunodeficiency Virus Testing: Expanded Recommendations

ABSTRACT: Early identification and treatment of all pregnant women with human immunodeficiency virus (HIV) is the best way to prevent neonatal disease and improve the woman’s health. Human immunodeficiency virus screening is recommended for all pregnant women after they are notified that they will be tested for HIV infection as part of the routine panel of prenatal blood tests unless they decline the test (i.e., opt-out screening). Repeat testing in the third trimester, or rapid HIV testing at labor and delivery as indicated or both also are recommended as additional strategies to further reduce the rate of perinatal HIV transmission. The American College of Obstetricians and Gynecologists makes the following recommendations: obstetrician–gynecologists should follow opt-out prenatal HIV screening where legally possible; repeat conventional or rapid HIV testing in the third trimester is recommended for women in areas with high HIV prevalence, women known to be at high risk for acquiring HIV infection, and women who declined testing earlier in pregnancy; rapid HIV testing should be used in labor for women with undocumented HIV status following opt-out screening; and if a rapid HIV test result in labor is positive, immediate initiation of antiretroviral prophylaxis should be recommended without waiting for the results of the confirmatory test.

ACOG Committee Opinion No. 418: prenatal and perinatal human immunodeficiency virus testing: expanded recommendations. Obstet Gynecol. 2008 Sep;112(3):739-42. http://www.ncbi.nlm.nih.gov/pubmed/18757690

AFP American Family Physician

Health maintenance for postmenopausal women

Menopause is the permanent cessation of menstruation resulting from the loss of ovarian and follicular activity. It usually occurs when women reach their early 50s. Vasomotor symptoms and vaginal dryness are frequently reported during menopause. Estrogen is the most effective treatment for management of hot flashes and night sweats. Local estrogen is preferred for vulvovaginal symptoms because of its excellent therapeutic response. Bone mineral density screening should be performed in all women older than 65 years, and should begin sooner in women with additional risk factors for osteoporotic fractures. Adequate intake of calcium and vitamin D should be encouraged for all postmenopausal women to reduce bone loss. Coronary artery disease is the leading cause of death in women. Postmenopausal women should be counseled regarding lifestyle modification, including smoking cessation and regular physi-

cal activity. All women should receive periodic measurement of blood pressure and lipids. Appropriate pharmacotherapy should be initiated when indicated. Women should receive breast cancer screening every one to two years beginning at age 40, as well as colorectal cancer screening beginning at age 50. Women younger than 65 years who are sexually active and have a cervix should receive routine cervical cancer screening with Papanicolaou smear. Recommended immunizations for menopausal women include an annual influenza vaccine, a tetanus and diphtheria toxoid booster every 10 years, and a one-time pneumococcal vaccine after age 65 years.

Rao SS, Singh M, Parkar M, Sugumaran R. Health maintenance for postmenopausal women. Am Fam Physician. 2008 Sep 1;78(5):583-91. http://www.ncbi.nlm.nih.gov/pubmed/18788234

Patient Education:

Information from your family doctor. Menopause: what you should know

Rao SS, Singh M, Parkar M, Sugumaran R. Information from your family doctor. Menopause: what you should know. Am Fam Physician. 2008 Sep 1;78(5):593-4. http://www.ncbi.nlm.nih.gov/pubmed/18788235

Ask a Librarian

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

BMJ Clinical Evidence Adds Medical Conditions

Clinical Evidence added 50 more conditions for a total of 250. The resource offers summaries of conditions with treatment options. It’s quick, brief, and easy to use.

- Includes evidence-based research sourced from over 10,000 peer-reviewed references and covers over 570 clinical questions and 3000+ interventions.
- Provides background information with references.
- Sends alerts from monthly updates and new reviews.
- Offers drug safety alerts.
- Contains emerging research information.
- Links to practice guidelines, site tools and EBM resources.

To access Clinical Evidence from the HSRL website go to:

Research Tools > Databases > Clinical Evidence.

If you have questions about accessing or using Clinical Evidence, contact me at cooperd@mail.nih.gov or 301.594.2449.

Behavioral Health Insights

Peter Stuart, IHS Psychiatry Consultant

Antipsychotics—The Old versus the New—What Should I Use?

A number of recent reports suggest that the differences in efficacy and side effect burden between the old “typical” antipsychotics and the new “atypical” antipsychotics are not as significant as once proposed. The CATIE (Clinical Antipsychotic Trials in Intervention Effectiveness) trial compared four of the new agents to an old agent, perphenazine, and found that there was no substantial advantage of the newer agents over perphenazine in the treatment of schizophrenia. This came as quite a surprise to many who assumed the newer agents would outperform perphenazine. A large VA funded study came out shortly thereafter comparing olanzapine and haloperidol—again there was little overall advantage to the use of either medication. More recently the Cost Utility of the Latest Antipsychotic Drugs in Schizophrenia Study (CUtLASS 1) also found little clinical difference even for clinical concerns such as extrapyramidal symptoms between the older agent(s) and the atypicals used. Finally, just out in September in the American Journal of Psychiatry, findings from the Treatment of Early-Onset Schizophrenia Spectrum Disorders (TEOSS) Study suggest similar outcomes in youth when newer agents were compared to molindone; an older though infrequently used antipsychotic.

Of particular interest and import for the aforementioned studies—all of them received no industry funding.

Recent reports of increased death rates in elderly patients taking risperidone and other atypicals as well as older agents, and the now well documented metabolic issues and clinically detrimental weight gain with many of the atypicals only add to concerns.

On the other hand, despite the black box warnings for increased rates of death in elderly populations using the newer atypicals—first generation antipsychotics may actually have associated rates of death that are even higher than the atypicals.

As Dr. Jeffrey Lieberman, the lead investigator of the CATIE trials was quoted as saying, the second generation antipsychotics or atypicals represent an “incremental” improvement over first generation drugs—not game-changing medications. Clozapine remains the gold standard for the treatment of schizophrenia of all the antipsychotics. It was, however, excluded from the first arms of these studies as it is replete with side effects and serious, unpredictable toxicity and as such is not as commonly used except for treatment of refractory psychosis.

So where does this leave primary care practitioners in busy practices—particularly when using these medications for off-label uses such as managing aggressive behavior in patients with dementia? Judged solely by prescriptive volume the atypicals remain the first choice for most providers. While the reduction in the occurrence of tardive dyskinesia remains only partially proven, it is a particularly troubling and disfiguring consequence and a strong reason to continue first line use of atypicals—though the bulk of the evidence now suggests that otherwise ef-

ficacy and total side effect burdens are similar compared to many first generation antipsychotics.

Some suggested rules:

Rule #1—consider your patient’s particular risks—is the main risk obesity and diabetes (try aripiprazole or ziprasidone), or sedation (try aripiprazole, ziprasidone or risperidone), or sensitivity/risk of tardive dyskinesia and EPS (elderly, those with histories of brain injury or dysfunction) (try quetiapine)?

Rule #2—choose your antipsychotic based on its side effect profile. In our populations that often means starting with one that has a benign metabolic profile and limited EPS symptoms—aripiprazole remains a good starting point. Quetiapine in small amounts particularly for the elderly (25-75 mg daily) is helpful for situations in which some sedation is needed.

Rule #3—if using any of the atypicals get a good metabolic baseline including lipid status and watch your patient’s weight. These effects are not specifically dose dependent and the weight gain can be quite rapid. Nutritional counseling at the outset is suggested.

Rule #4—the old standby, haloperidol, remains a good option in the ICU setting for the management of acute delirium and agitation. Its distribution, metabolism and pharmacological effects are well understood and used thoughtfully remains the gold standard. IV use, while not included in its FDA indication, appears to reduce its EPS profile. Caution is indicated for IV use—EKG monitoring for torsades is recommended along with repletion of potassium and magnesium levels if indicated. See the article “Postoperative Delirium” by Fricchione et al in a recent issue of AJP for an excellent review. Psychotic agitation in the ER is better managed with one of the newer atypical agents available in IM formulation (olanzapine, aripiprazole) due to their lower propensity to induce EPS symptoms particularly in young males. Liquid formulations (risperidone) and disintegrating tablets (risperidone and olanzapine) are also available.

Rule #5—always document counseling your patient and/or their guardian/family members for any off-label uses. The risks of use are significant—but often there are few alternate options. Chronic use should be regularly reviewed and attempts made to discontinue use where appropriate.

Rule #6—consult your local psychiatrist.

References are available in the on-line edition at <http://www.ihs.gov/MedicalPrograms/MCH/M/ob.cfm>.

Breastfeeding

Suzan Murphy, PIMC

Mastitis and Plugged Ducts

AUTHOR: Tony Nazario, Senior Nursing Student, Arizona State University, Summer Student Nurse Extern—PIMC (With a special thank you to LT Jing Li, PharmD for generously providing technical expertise for this article.)

What is mastitis?

Mastitis is an acute inflammation of the breast tissue that nearly one quarter of women report experiencing. It often occurs within the first six weeks after delivering but women are at risk for getting mastitis throughout breastfeeding. It is an uncomfortable condition and some women may prematurely wean their children as a result, however, this is discouraged, as continued breast-feeding is part of the treatment process.

Signs and Symptoms

Signs and symptoms are the first indicators of a problem and if they are present, referring to breastfeeding support and/or scheduling an appointment with a physician are recommended.

Signs and Symptoms of an infection:

- sudden onset
- localized intense pain
- redness or swelling of the breast
- the breast may feel warm to touch
- Flu-like symptoms
- a fever of 101° F or higher

Signs and Symptoms of a plugged duct:

- gradual onset
- mild localized pain
- location may shift
- breast may feel slightly warm to touch
- a low-grade fever 101° F or lower
- generally feels well

Causes

An infection can occur anytime a pathogen (disease causing micro-organism such as bacteria) enters the breast and infect the tissue. This can occur through vulnerable areas of the breast/nipple where the skin is cracked/broken or sore.

Inflammatory mastitis occurs due to “milk stasis.” Milk stasis is when milk does not completely drain from the breast. When the breast does not fully drain after feeding, the milk that is remaining in the breast can clog the mammary duct(s).

Risk Factors for mastitis include:

- Cracked or sore nipples
- A previous history of mastitis
- Only feeding the child in one position (This increases the risk for mastitis because the breast may not be able to completely drain.)
- Feeding only one side at each feeding

- Wearing a tight fitting bra (This can restrict the flow of milk).
- Extreme fatigue and stress can cause the normal body defenses to be weakened and that can place the mother at an increased risk for bacterial infection.

Treatment

If mastitis is suspected a physician should be contacted to make a proper diagnosis. If the woman is experiencing mastitis related to an infection, antibiotic therapy will be required. Antibiotics therapy often provides rapid results and relief within days of beginning treatment. In order to fully combat bacterial mastitis the client will need to complete the full round of antibiotics* even when signs and symptoms have gone away. Continued breastfeeding is highly encouraged to prevent additional blockages and maintain milk flow.

In cases of plugged ducts (inflammatory mastitis) self-care remedies are suggested. Applying wet or dry heat to the affected area followed by gentle massages. Women are also encouraged to shower or apply hot wet packs between feedings. As with mastitis, continued breastfeeding is highly encouraged to prevent additional blockages and maintain milk flow.

Prevention

Frequent feedings that fully allow the breast to drain are recommended to prevent blockages.

*Information provided by Jing Li, PharmD, LT USPHS. According to UpToDate, current antibiotics used for mastitis are dicloxacillin or cloxacillin 500 mg four times a day for ten to fourteen days. If there is no response in 24-48 hours, a regimen of cephalexin or augmentin is advised. If mastitis recurs repeatedly in the same area it is advisable to rule out breast cancer.

According to NIH Lactnet (<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?LACT>) dicloxacillin, cloxacillin, cephalexin and augmentin are compatible with breastfeeding.

For more information, please see:

Biancuzzo, M, Breastfeeding the Newborn: Clinical Strategies for Nurses, Mosby Inc. 2003.

Lawrence RA, Breastfeeding: A Guide for the Medical Profession, 6th Edition, Mosby, Inc. 2005.

The IHS/MCH Website includes many Breastfeeding Resources: <http://www.ihs.gov/MedicalPrograms/MCH/M/bf.cfm>

International Health Update

Claire Wendland, Madison, WI

Preventing and treating HIV/AIDS in Thai prisons

As antiretroviral therapy for HIV reaches poor and middle-income countries at last, health workers involved in the scale-up of treatment programs have increasingly tried to reach marginalized groups to offer testing and treatment. Treating such groups can be seen as both a moral and a public health imperative: in many countries, intravenous drug users, migrant laborers, men who have sex with men, and prisoners are sources of transmission in the community at large.

An article by David Wilson and colleagues from Doctors Without Borders (MSF) gives some sense of the difficulties and potential of prison-based programs. The health services at two large prisons in Bangkok asked MSF to provide clinical support for treatment of HIV in 2003. Once the MSF staff had established a good relationship with the prisons, they were also invited to expand into prevention. In Thailand, prisons are more than 50% over capacity. When out of their cells during the day, inmates stay in large “common rooms” packed with hundreds of others. Health services are poorly staffed and underfunded, but health needs, especially HIV-related needs, are high. Intravenous drug users, sex workers, and undocumented migrants (mostly from Burma/Myanmar, in which civil conflict rages) make up a huge proportion of the prison population—well over half of those imprisoned are there for drug-related offenses—and all three of these groups are at particularly high risk for HIV. Perhaps it is no surprise then that that HIV seroprevalence rates in prisoners are at least fifteen times as high as those in the general population (compared to roughly ten times as high in the United States, though in both cases the estimates are based on fairly limited data). In Thailand, this high rate is probably in large part a result of the considerable population of intravenous drug users in prison, but further spread of HIV in prison is related to unsafe sex—both consensual and non-consensual. To a much lesser extent, sharing of drug injection equipment and unsafe tattooing also contribute to in-prison HIV transmission.

Diagnosis is usually made when a prisoner presents with an opportunistic infection. Sometimes prisoners seek testing after other prisoners have died, though many are legitimately worried about maintaining confidentiality. Once diagnosed, taking one’s medicines in these overcrowded settings can be problematic because the disease is stigmatized, but Wilson and colleagues report that peer support systems (a central part of Thailand’s national HIV/AIDS strategy) have been very helpful in easing stigma and encouraging adherence to medication regimens. Treatment is more challenging once prisoners have left the facility. Frequent transfers of inmates to smaller, less crowded prisons can make follow-up tricky. It is more difficult yet to make sure prisoners can continue treatment once they are released; Thailand’s national health insurance program covers therapy, but undocumented migrants or those who have lost their ID cards face real obstacles in accessing care, and most prisoners have poor social support on release.

Effective prevention programs have also been a challenge.

Inmates will listen to educational programs, but the disconnect between what is supposed to happen in prison and what actually does happen poses problems. For instance, prison guards, though they express strong support for HIV prevention, are generally not willing to participate in condom distribution, which they see as sanctioning sex. Nonetheless, Wilson and colleagues see some softening of these attitudes and have hope for the long-term success of both prevention and treatment programs. They encourage colleagues around the world by concluding that “barriers that prevent the provision of treatment in prisons when it is available outside are not technical or financial, but political.”

Wilson D, Ford N, Ngamdee V, Chua A, Kyaw MK. HIV prevention, care, and treatment in two prisons in Thailand. PLoS Med. 2007 Jun;4(6):e204. <http://www.ncbi.nlm.nih.gov/pubmed/17593894>

Medical Mystery Tour

Neil Murphy; Southcentral Foundation, ANMC

Fetal Heart Monitoring: The answers applied

As you have seen in the last two CCCC issues*, we have been defining terms in fetal heart monitoring so we have a common set of expectations. Now how do we use those terms in clinical practice?

Key Points From 2008 Nichd Electronic Fetal Monitoring Workshop

1. Uterine Contractions. The original report did not have guidelines for the interpretation of uterine contractions. Uterine contractions are quantified as the number of contractions present in a 10-minute window, averaged over 30 minutes.
 - Normal: ≤ 5 contractions in 10 minutes
 - Tachysystole: > 5 contractions in 10 minutes
 - *should be qualified as to the presence or absence of FHR decelerations
 - *may occur in spontaneous or stimulated labor
 - *hyperstimulation and hypertonus (which are referred to in ACOG Practice Bulletin No. 70) and hypercontractility are discouraged / no longer used.
2. Quantitation of Decelerations. Decelerations are defined as recurrent if they occur with $\geq 50\%$ of uterine contractions in any 20-minute window and intermittent if they occur with $< 50\%$ of uterine contractions in any 20-minute window.
3. General Considerations. The following general considerations were emphasized:
 - a. FHR response is a dynamic process and evolves over time; FHR patterns require frequent assessment.
 - b. The FHR tracing should be interpreted in its context and any categorization of a FHR tracing is limited to the time period of that particular assessment
 - c. Presence of accelerations reliably predicts the absence of fetal metabolic acidemia, but their absence does not predict the presence of acidemia. Similarly, moderate FHR variability reliably predicts the absence of fetal metabolic acidemia, but its absence does not predict the presence of acidemia.
4. Interpretation System. A three-tier interpretation system was

proposed to aid in reading, communicating, and managing FHR tracings. The best way to learn this system is to know categories I and II; all other FHR patterns are category II:

a. Category I (Normal): Strongly predictive of normal fetal acid-base status; may be followed in a routine manner. These tracings include all of the following:

- Baseline rate 110-160 bpm
- Moderate variability
- Absent late or variable decelerations
- Early decelerations may or may not be present
- Accelerations may or may not be present

b. Category II (Indeterminate): Not predictive of abnormal fetal acid-base status, require evaluation and continued surveillance and reevaluation, taking into account the clinical context.

c. Category III (Abnormal): Predictive of abnormal fetal acid base status; require prompt evaluation and management.

Include either:

- Absent baseline FHR with:
 - Recurrent (see above) late decelerations
 - Recurrent (see above) variable decelerations
 - Bradycardia
- Sinusoidal

Editorial Comment

Please update your maternity care guidelines to include the above criteria

The Indian Health system have spent the last several years attempting to improve the use of electronic fetal monitoring (EFM) by encouraging the use of the NICHD EFM criteria from 1997. The criteria apply to all nurses, residents, midwives, and attending physicians who are involved in maternity care. This is a major accomplishment and is a key factor our efforts to improve the patient safety climate in our system.

In April 2008 the NICHD directed a workshop to revisit the original 1997 NICHD recommendations; the updated definition and interpretation standards were published in September 2008 (see Hot Topics – Obstetrics). We encourage you to look over this publication, but in an effort to make you aware of the key changes. Continued adherence to the NICHD standards is critical to keep up our high levels of standards for care and communication.

In each of your Service Units and facilities you need to update your maternity care guidelines to include the above criteria.

Resources

Electronic fetal heart rate monitoring: research guidelines for interpretation. National Institute of Child Health and Human Development Research Planning Workshop. Am J Obstet Gynecol. 1997 Dec;177(6):1385-90. <http://www.ncbi.nlm.nih.gov/pubmed/9423739>

Macones GA, Hankins GD, Spong CY, Hauth J, Moore T. The 2008 National Institute of Child Health and Human Development workshop report on electronic fetal monitoring: update on definitions, interpretation, and research guidelines. Obstet

Gynecol. 2008 Sep;112(3):661-6. www.ncbi.nlm.nih.gov/pubmed/18757666

***Fetal Heart Monitoring: The answers**

www.ihs.gov/MedicalPrograms/MCH/M/ob.cf

.....

Midwives Corner

Lisa Allee, 4 Corners Regional Health Care Facility, Red Mesa, AZ

The conflict and compromises between how we want to practice midwifery and how we do practice midwifery in the hospital setting

Hunter’s qualitative research from the United Kingdom gives voice to something I would guess many midwives have experienced consciously or unconsciously when working in the hospital setting. She looked at the emotional work of midwives and found that rather than it being located in the midwife-patient relationships as found in other studies, it was generated by the conflict between a strong belief in the “with woman” ideology of the midwifery model and the pressures within a hospital setting to adhere to the ideology of “with institution” which frequently means providing care in prescribed ways rather than in ways that are individualized to the woman being cared for. This in congruency between how midwives truly want to practice and how they are pressured to practice in institutions creates emotional work. She found that midwives working in community-based practices, however, had very little of this conflict. Hunter makes suggestions for dealing with this conflict in the hospital-based setting. First and foremost she suggests the prime importance of explicitly recognizing this conflict and recognizing it as a universal issue rather than what is done currently which is interpreting it as a personal dilemma which often leads to guilt and self-blame—the individual midwife feels she is failing her patients instead of recognizing this as a system problem. She suggests short-term strategies of acknowledging the with-woman model of care ideals and the current realities of practice and providing education and support about the dilemmas that can arise. Then she discusses more long term strategies such as moving normal births to community-based midwifery with birth occurring either at home or in midwifery-led birth centers. She also discusses recognizing the hospital-based midwife as an expert in abnormal midwifery skilled in managing technology, caring for women with complications and still providing midwifery-model based care.

Hunter B. Conflicting ideologies as a source of emotion work in midwifery. Midwifery. 2004 Sept;20(3):261-72. <http://www.ncbi.nlm.nih.gov/pubmed/15337282>

Navajo News

John Balintona, Northern Navajo Medical Center

Navajo Area Women's Health Provider Meeting

The Navajo Area Women's Health Provider Meeting was held at Chinle, Arizona on September 12, 2008. Women's health care providers from the Navajo Nation attended the annual meeting to discuss pertinent topics, earn CME, and renew friendships and associations. Over the next several issues, selected summaries from the meeting will be published.

Annual Four Corners CNM Meeting

The annual meeting of the Four Corners Certified Nurse Midwives was held in conjunction with the Navajo Area Women's Health Provider Meeting in Chinle, Arizona. Certified Nurse Midwives from Chinle, Fort Defiance, Gallup, Shiprock, Kayenta, and Tsaile were present. Several topics were presented including promotion of breastfeeding on the Navajo Nation and support for pending legislation at the Navajo Nation Council aimed at eliminating barriers for breastfeeding at the workplace. Discussion took place as to the action by area CNMs to counteract the advertising pressure from formula companies and their affect on the feeding practices of newborns. The Four Corners chapter re-affirmed the close relationship between midwifery and the Navajo Area Indian Health Service. The midwives discussed the Centering Pregnancy Program for group prenatal care. Several sites noted preparations for starting programs at the service units starting in 2009. The group discussed several barriers and solutions for starting a Centering Pregnancy Program to include; space issues, scheduling of care conferences, maintaining cultural relevance, and provider concerns.

Continuing Medical Education: Preterm Labor Management

Attendees at the meeting were fortunate to earn CME credits by attending a presentation by Monique Lin, MD, perinatologist from the Phoenix Perinatal Associates. The topic of Dr. Lin's presentation concerned current information regarding several aspects of preterm labor management.

Highlights

- Magnesium Sulfate may be losing favor as a primary tocolytic. (Obstet Gynecol. 2006 Oct;108(4):986-9)
- Magnesium Sulfate may reduce the risk of cerebral palsy in fetuses at risk for preterm birth. (N Engl J Med. 2008 Aug 28;359(9):895-905)
- Phoenix Perinatal Associates recommends continued use of Magnesium Sulfate for maternal transport.*
- Antepartum Progesterone for preterm labor
 - o 17 hydroxyprogesterone caproate has been shown to reduce preterm birth for those at risk for preterm delivery.
 - o The ideal formulation and delivery of medication is unknown.
 - o Availability may be an issue in the NAIHS.

**The statement in no way suggests that this method of care is uniform for all cases consulted by the Phoenix Perinatal Associates. The author advises interpretation and consultation for each individual case.*

Office of Women's Health, CDC

Emergency Planning Tips If You're Pregnant or Have Young Children

This CDC website has resources to help pregnant women and families with young children plan for an emergency or disaster.

Resources include what to do

- If you are asked to evacuate;
- If you have to stay in a shelter or place other than your home;
- During and just after a disaster; or
- If you are recovering from a disaster

There is also a list of preparedness/disaster resources and a link to the ACNM "Emergency Childbirth" section.

www.cdc.gov/Features/Emergencies/Pregnancy-Infants.html

Electronic Media and Youth Violence: A CDC Issue Brief for Educators and Caregivers

Electronic Media and Youth Violence: A CDC Issue Brief for Educators and Caregivers focuses on the phenomena of electronic aggression. Electronic aggression is defined as any kind of harassment or bullying that occurs through email, chat rooms, instant messaging, websites, blogs, or text messaging. The brief summarizes what is known about young people and electronic aggression, provides strategies for addressing the issue with young people, and discusses the implications for school staff, education policy makers, and parents and caregivers.

www.cdc.gov/ncipc/dvp/YVP/electronic_aggression.htm

Women's Health Headlines

Carolyn Aoyama, HQE

Differentiation among Types of Intimate Partner Violence: Research Update and Implications for Interventions.

A growing body of empirical research has demonstrated that intimate partner violence is not a unitary phenomenon and that types of domestic violence can be differentiated with respect to partner dynamics, context, and consequences. Four patterns of violence are described: Coercive Controlling Violence, Violent Resistance, Situational Couple Violence, and Separation-Instigated Violence. The controversial matter of gender symmetry and asymmetry in intimate partner violence is discussed in terms of sampling differences and methodological limitations. Implications of differentiation among types of domestic violence include the need for improved screening measures and

procedures in civil, family, and criminal court and the possibility of better decision making, appropriate sanctions, and more effective treatment programs tailored to the characteristics of different types of partner violence. In family court, reliable differentiation should provide the basis for determining what safeguards are necessary and what types of parenting plans are appropriate to ensure healthy outcomes for children and parent-child relationships.

Kelly JB, Johnson MP. *Differentiation among Types of Intimate Partner Violence: Research Update and Implications for Interventions*. *Family Court Review*. Vol. 46 No. 3, July 2008 476—499.

No URL is available for the above article. Contact Carolyn Aoyama for additional information. Carolyn.Aoyama@ihs.gov.

(Diabetes mellitus ..., continued from page 1)

nancy will go on to have PGDM with a subsequent pregnancy; these women merit special attention during pregnancy and also vigorous postpartum follow-up. In pregnancy many women are motivated to make dramatic lifestyle changes for the health of their baby; success in maintaining these changes after delivery is less common. Yet the postpartum period is a unique opportunity as this is also the pre-conceptual period for any subsequent pregnancy. Our efforts must combine the use of medical therapies, when necessary, with sustained lifestyle modification to reduce the risk of diabetes to both maternal health and to the health of future pregnancies.

Other efforts at preventing birth defects through targeted intervention have met with varying success. Folic acid fortification of food has resulted in a 20–30% decrease in the rates of neural tube defects (spina bifida and anencephaly) in the U.S.¹ Efforts to decrease rates of fetal alcohol spectrum disorders (FASD) have not been as clearly successful. For FASD, the data is limited and increased rates of diagnosis (likely due to heightened awareness amongst pediatric healthcare providers) have obscured any clear decrease in overall incidence.² FASD interventions have relied primarily on public health messaging about the dangers of alcohol. Actual resources for women to address alcoholism and binge drinking have not been as forthcoming. As the rates of diabetes and obesity continue to increase dramatically nationally, positive and truly effective public health

messaging about the importance of optimal glucose control and achieving a healthy body weight prior to pregnancy merits careful attention. These population-based efforts must be paired with individual systems of support that improve access to medical care for women with diabetes and pre-diabetes and develop living environments that foster healthy food choices and exercise. These interventions are vital to both child health and maternal health.

¹Centers for Disease Control. *Folic Acid and Prevention of Spina Bifida and Anencephaly 10 Years After the U.S. Public Health Service Recommendation*. September 13, 2002 / 51(RR13):1-3. http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5730a1.htm?s_cid=mm5730a1_e

²Centers for Disease Control. *Tracking Fetal Alcohol Syndrome. Fetal Alcohol Spectrum Disorders*. <http://www.cdc.gov/ncbddd/fas/fassurv.htm>

Resources from the March of Dimes:

For Health Care Professionals:

http://www.marchofdimes.com/professionals/14332_1197.asp

For Patients:

Gestational Diabetes:

http://www.marchofdimes.com/pnhec/188_1025.asp

Pre-existing Diabetes:

http://www.marchofdimes.com/pnhec/188_1064.asp

Save the dates

Medical Providers' Best Practices Conference, 3rd Annual

- November 18–19, 2008;
- Sacramento, CA
- California Area Indian Health Service
- More information: 916.930.3937 or IHS-CAOGPRA@ihs.gov

2008 Indian Health Information Management Conference, "Managing Health Information Technology to Improve Performance and Outcomes"

- December 15–19, 2008
- Phoenix, Arizona
- Information at: www.ihs.gov/cio/thimc

First International Meeting on Indigenous Women's Health/Third International Meeting on Indigenous Child Health Conference; Many Voices into One Song

- Women's Health March 4–6, 2009
- Child Health March 6–8, 2009
- Albuquerque, NM
- Joint conference of Women's Health and Children's Health Providers from Canada and the United States

Advances in Indian Health Conference

- April 21–24, 2009
- Albuquerque, NM
- Indian Health's conference for primary care providers and nurses
- 28 hours of CME/CE credit
- Optional Diabetes track
- Contact the Course Director, Dr. Ann Bullock, at annbull@nc-choke.com for more information.

Abstract of the Month

- Diabetes mellitus and birth defects

IHS Child Health Notes

- Universal screening for hearing loss in newborns: US Preventive Services Task Force
- Recent literature on American Indian/Alaskan Native Health—A Longitudinal Study of a Pediatric Practice-based Versus an Agency-Based Model of Care Coordination for Children and Youth with Special Health Care Needs.

From Your Colleagues

- Jean Howe, CCC, Ob/Gyn—"Many Voices into One Song"
- Robert McSwain, IHS Director—Susan V. Karol, MD, named IHS Chief Medical Officer
- Sheila Warren, Headquarters—Joint Commission Resources is Challenging YOUR HOSPITAL to increase Health Care Worker Vaccination against the Flu

Hot Topics

- Obstetrics—Electronic Fetal Monitoring: Update on Definitions and Interpretation
- Gynecology—Methicillin-resistant Staphylococcus aureus as a common cause of vulvar abscesses
- Child Health—Ibuprofen more effective than acetaminophen for treating fever in children
- Chronic disease and illness—Incidence and Risk Factors for Stroke in American Indians; The Strong Heart Study

Features

- ACOG—Fetal Lung Maturity—Medroxyprogesterone Acetate and Bone Effects—The Uninsured—Addressing Health Risks of Noncoital Sexual Activity—Prenatal and Perinatal Human Immunodeficiency Virus Testing: Expanded Recommendations
- AFP American Family Physician—Health maintenance for postmenopausal women
- Behavioral Health Insights—Antipsychotics—The Old versus the New
- Breastfeeding—Mastitis and Plugged Ducts
- International Health Update—Preventing and treating HIV/AIDS in Thai prisons
- Navajo News—Navajo Area Women's Health Provider Meeting
- Office of Women's Health, CDC—Emergency Planning Tips If You're Pregnant or Have Young Children

CCC Corner
c/o Neil Murphy, MD
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