NATIONAL COUNCIL OF CHIEF CLINICAL CONSULTANTS

CCC CORNER

Focus on the Health of American Indian and Alaska Native Women and Children

Vol 4, No 11
Nov 2006

Regular Cola Intake
Reduces Bone Mineral Density in Women

BACKGROUND: Soft drink consumption may have adverse effects on bone mineral density (BMD), but studies have shown mixed results. In addition to displacing healthier beverages, colas contain caffeine and phosphoric acid (H_3PO_4), which may adversely affect bone.

RESULTS: Cola intake was associated with significantly lower ($P < 0.001$-0.05) BMD at each hip site, but not the spine, in women but not in men. The mean BMD of those with daily cola intake was 3.7% lower at the femoral neck and 5.4% lower at Ward's area than of those who consumed <1 serving cola/mo. Similar results were seen for diet cola and, although weaker, for decaffeinated cola. No significant relations between noncola carbonated beverage consumption and BMD were observed. Total phosphorus intake was not significantly higher in daily cola consumers than in nonconsumers; however, the calcium-to-phosphorus ratios were lower.

CONCLUSIONS: Intake of cola, but not of other carbonated soft drinks, is associated with low BMD in women. Additional research is needed to confirm these findings.

Tucker KL et al Colas, but not other carbonated beverages, are associated with low bone mineral density in older women: The Framingham Osteoporosis Study. Am J Clin Nutr. 2006 Oct;84(4):936-42

OB/GYN CCC Editorial

Bone Density Evaluation in Teens Prevents Future Osteoporosis

While regular cola consumption has many detrimental effects, e.g. obesity and dental caries just for starters, Tucker KL et al now have added a new item to that list, bone loss in women.

The following are excerpts from Loud and Gordon in October's Arch Pediatr Adolesc Med. on Adolescent Bone Health.

Clinical Context

Peak bone mass, which reaches its maximum between ages 20 to 29 years, is a predictor of osteoporosis. Up to 60% of adult total bone mineral is acquired during adolescence, according to Bonjour and colleagues in the September 1991 issue of the Journal of Clinical Endocrinology and Metabolism. Factors that affect bone health include the following: body weight, exercise, medications, hormonal status, genetics, calcium, vitamin D, general health, nutrition, and other lifestyle factors.

This review examines patients at risk for poor skeletal health, methods for evaluation of skeletal status, indications for bone density measurement, therapies for low BMD, and recommendations for physical activity and nutrition in adolescents.

The complete is online with DEXA recommendations, etc…

Pearls for Practice

- Conditions associated with poor bone health include chronic conditions, endocrinopathies, medium- to long-term use of certain medications, deleterious behaviors, and bone disease. Evaluation of BMD by QCT and DEXA must be adapted for children. Long-term effects of medication treatment need to be studied in adolescents.
- Recommendations for all adolescents include exercise during peak height velocity, dietary calcium of 1300 mg/day for ages 9 to 18 years and 1000 mg/day for ages 19 to 50 years, and vitamin D 200 IU/day for all children; an optimal exercise regimen has not been determined.

Loud KJ, Gordon CM. Adolescent bone health. Arch Pediatr Adolesc Med. 2006 Oct;160(10):1026-32

THIS MONTH

Fetus is cephalic most of its life in utero, not 'vertex'

Vertex presentation is rarely the correct term. The fetus is vertex for the short time it takes to transit the pelvis after full engagement. Cephalic has Greek origins: kephalikos meaning "head". The vertex is the highest point of the skull. It lies between the parietal bones in the median sagittal plane.

Flexion of the fetal chin onto the chest is not complete until the sub occipitobregmatic diameter presents. The vertex is presenting only until the head extends after descent and internal rotation. As the fetal head extends under the pubic symphysis, it is no longer vertex.

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

Nov 2006

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

"A long habit of not thinking a thing wrong, gives it a superficial appearance of being right, and raises at first a formidable outcry in defence of custom. But the tumult soon subsides. Time makes more converts than reason."
—Thomas Paine 1776

Article of Interest

Tall girls: the social shaping of a medical therapy.

Arch Pediatr Adolesc Med. 2006 Oct;160(10):1035-9.

During the latter half of the 20th century estrogen therapy was given to prevent otherwise healthy girls with tall stature from becoming tall adults by inhibiting future linear growth. Estrogen therapy represented the logical application of scientific knowledge regarding the role of estrogen for closure of the growth plates, but it also reflected prevailing societal and political beliefs about what it meant to be a tall girl. The authors also discuss the rise and fall in popularity of this therapy and suggest that it has implications for the current therapy of short stature with growth hormone.

Editorial Comment

Here was a medical therapy being applied to what was clearly not a medical problem. Especially interesting is how the definition of "unacceptable" height for girls changed over time while this therapy was never applied to males to make them less tall. The article reminds us how medical knowledge and therapy is always applied within a particular social context.

Infectious Disease Updates.

Rosalyn Singleton, MD, MPH

Rotavirus Vaccine licensed: How do diarrhea-associated hospitalization rates among American Indian and Alaska Native children compare with the rates for children in the US general population?

It often appears that that AI/AN children have higher rates of just about any infectious disease. But what's the story with gastroenteritis and rotavirus?

In 1980-1982, the rate of diarrhea-associated hospitalizations in American Indian and Alaska Native (AI/AN) children <5 years (236 per 10,000) was nearly twice as high as the US rate (136). However, by 1993-1995, the AI/AN hospitalization rate (71) was similar to the US rate (89). An updated analysis reveals that the hospitalization rate for 2000-2004 for AI/AN children <5 years of age (66) is similar to or lower than the 2003 US childhood rate (79). The AI/AN hospitalization rate varied by region, with the highest rate in the Southwest region (93), followed by the East (79) and Alaska (77).

However, there are still areas of disparity. The 2000-2004 AI/AN hospitalization rate in infants (262) is significantly higher than the US rate (154), and the rate of outpatient visits for AI/AN children <5 years (2,255 per 10,000) is also higher than the US outpatient rate (1,648).

What about the burden of rotavirus disease? Unfortunately, only 2.7% of the AI/AN diarrhea-associated hospitalizations and 0.2% of outpatient visits were coded as rotavirus. This proportion underestimates the true burden of rotavirus. Epidemiologic characteristics, such as the age range and seasonal peak of diarrhea-associated hospitalizations, suggest that the proportion of diarrhea-associated hospitalizations caused by rotavirus among AI/AN children may be similar to proportion seen in the US population (~ 30-50% of diarrhea-associated hospitalizations). RotaTeq™, a live oral pentavalent rotavirus vaccine, is now licensed and available for use in infants 6-32 weeks of age.

Recent literature on American Indian/ Alaskan Native Health

Doug Esposito, MD

Prevalence and comorbidity of mental disorders among American Indian children in the Northern Midwest.

J Adolesc Health. 2006 Sep;39(3):427-34. Epub 2006 Jul 10.

The authors report on the prevalence of 11 mental disorders in 10-12-year old American Indian children in the Northern Midwest. This study compliments a previous article published by the same group of researchers which described the 12-month and lifetime prevalence of five mental disorders seen in the caretakers of these same children. That article was reviewed for the August 2006 edition of the IHS Child Health Notes
www.ihs.gov/MedicalPrograms/MCH/M/documents/ICHn806.doc

Information on the 11 disorders was gathered from DISC-R diagnostic surveys conducted by trained non-clinician community members who interviewed the children and their parents/ caretakers. Study subjects resided on or near one of four rural American Indian reservations in the Northern Midwest or one of five rural or remote Canadian First Nations reserves in Ontario. All sites are of one culture and language, with only minor dialectic variations. The disorders investigated were substance abuse disorders (alcohol abuse, alcohol dependence, marijuana

abuse, marijuana dependence, and nicotine dependence), major depressive episode, dysthymic disorder, general anxiety disorder, oppositional defiant disorder, conduct disorder, and inattention/hyperactivity disorder.

The authors report that 22.8% of the children satisfied the 12-month diagnostic criteria for at least one of the 11 mental disorders under investigation, while 9% met criteria for two or more disorders. The most prevalent disorder was conduct disorder (8.6%), followed by oppositional/defiant disorder (7.9%), and then inattention/hyperactivity disorder (7.6%) and general anxiety disorder (4.1%). Major depressive disorder (3.6%) rounded out the top five most prevalent conditions. The reported prevalence rates represent a combination from both caretaker and child reports. The rationale behind this methodology is discussed in detail in the article, but is beyond the scope of this review. Obviously, however, rates combined from both data sources will exceed those reported individually by either the caretaker or the child.

The authors contend that their results support the contemporary theory that ineffective parenting plays a pivotal role in the development of mental and behavioral disorders in offspring. Conditions and realities that negatively influence the effectiveness of parenting would be expected to increase the likelihood that children would develop these mental conditions. In multivariate analysis, they found an association between female caretaker depression and alcohol abuse with mental disorders in their children. As reported in their initial published article of mental disorders among the parents/caretakers of these same children (see link above), lifetime alcohol abuse was found to be nearly five times that observed in a national cohort. Thus, they contend, children in this study are at increased risk of exposure to "nonoptimal parenting," and by association, a high prevalence of certain mental disorders would be expected. Additionally, approximately 20% of the female caretakers of these children were found to have a lifetime prevalence of major depression in the previous report. Given that depression is known to be disruptive of the parenting process, the authors imply that the development of mental disorders in children exposed to a depressed female caretaker would be more likely to occur.

The authors warn about the generalizability of their results to other American Indian cultures. Other limitations of the data are discussed, and can be examined by the interested reader in the article itself.

Editorial Comment

There seems to be a recent proliferation of articles scrutinizing mental and behavioral health problems in American Indian/Alaska Native (AI/AN) communities. Individually, I believe many of these papers simply point out some of the things we perhaps already intuitively know. In toto, however, I am hopeful that this body of data and knowledge will serve to focus attention on the mental and behavioral problems and needs of these populations. Ultimately, this might lead to an increase in resources and programs devoted to dealing with the prevalent mental health issues of AI/AN populations. OK, I can dream, can't I?!

QuickStats: adolescent death rates by race/ethnicity and sex—United States, 2001-2003. MMWR

Morb Mortal Wkly Rep. 2006 Sept 1;55(34):943.
www.cdc.gov/mmwr/preview/mmwrhtml/mm5534a5.htm

Editorial Comment

Just an "FYI." American Indian/Alaska Native children ages 15-17 years as a group lead the pack in both male and female death rates. Although AI/AN females are nearly twice as likely to die as the next closest ethnic group (White, non-Hispanic, 60.4 vs. 36.6 deaths/100,000 population), males are barely ahead of Black, non-Hispanic youth (89.6 vs. 89.3 deaths/100,000 population). As acknowledged in the footnotes of the QuickStats, AI/AN death rates are known to be underestimated, often by sizeable margins. Translation: the disparity might be a whole lot more dramatic in reality than this nifty little bar graph suggests.

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 online job board), please forward the information to:
indianhealth@aap.org
or complete the on-line locum tenens form at:
www.aap.org/nach/locumtenens.htm

This a page for sharing "what works" as seen in the published literature as well as what is done at sites that care for American Indian/Alaskan Native children. If you have any comments contact Steve Holve, MD, Chief Clinical Consultant in Pediatrics at sholve@tcimc.ihs.gov

From Your Colleagues

Brenda Neufeld, Sells

Fish Intake, Contaminants, and Human Health

Here is an interesting article in case you haven't seen it—reviews the data on fish oil and cognitive development, as well as other issues. It is from JAMA's Clinician's Corner.

Conclusions: For major health outcomes among adults, based on both the strength of the evidence and the potential magnitudes of effect, the benefits of fish intake exceed the potential risks. For women of childbearing age, benefits of modest fish intake, excepting a few selected species, also outweigh risks.

Mozaffarian D, Rimm EB Fish Intake, Contaminants, and Human Health: Evaluating the Risks and the Benefits JAMA. 2006;296:1885-1899.

OB/GYN CCC Editorial

Another aspect is the worry about mercury contamination: Not to worry with young fish

The controversy continues, but some balance has begun to appear. Meanwhile, the Hg levels in species of salmon are quite low, and any amount you want to eat is safe. Halibut, with the exception of the very largest fish, several hundred pounds, is also low. Even the largest halibut is not really that high, and you'd have to eat many pounds weekly to raise your blood Hg level to a level where infant outcomes are affected, and you'd have to do it constantly, as the half-life is not that long. More definitive information will be available after the first of the year.

Dawn Wyllie, Bemidji Area

Perinatal depression evidence based care

This 92 page narrative and twice again number of pages with references, glossary, tables, and appendices published in 2005 should be a ready reference for those of you who want to understand the research surrounding perinatal depression prevalence and screening.

Conclusions: Although limited, the available research suggests that depression is one of the most common perinatal complications and that screening is feasible and fairly accurate.

AHRQ report: Evidence Report/Technology Assessment Number 119 Perinatal Depression: Prevalence, Screening Accuracy and Screening Outcomes

Other Depression Resources

Judy Thierry

Depression—focused on moms who present during a child health visit

In this 1 credit CME/CEU the following are discussed among many other items

- Awareness and facilitating screening
- Parental depression is just not post partum
- Screening tools in the office
- PHQ2
- Edinburgh

www.medscape.com/viewprogram/6101

More on Depression from the Commonwealth Fund web site: www.cmwf.org

Go to 'search' and type in 'depression'

PDF's, slides, brochures.

1. Wallet guide
2. ppt—Feeling blue communication poster
3. 2 page guide for providers on "parenting for depression"
4. Parent's frequently asked questions on screening
5. Guide for parents—when times are tough—age specific guidance with child age groups
6. Can a depressed parent be a good parent—You bet!
7. Tips on Healthy Parenting for mothers with depression
8. why is parental depression an important issue
9. ppt poster—facts on depression
10. Summary of Brief Paper-Based Depression Screening Tools

One minute questionnaire now being used in primary care settings

It is sometimes referred to as PQ_2.

www.cmwf.org/usr_doc/PHQ2.pdf

Over the past two weeks, how often have you been bothered by any of the following problems?

Little interest or pleasure in doing things.

0 = Not at all

1 = Several days

2 = More than half the days

3 = Nearly every day

Feeling down, depressed, or hopeless.

0 = Not at all

1 = Several days

2 = More than half the days

3 = Nearly every day

Total point score: _____

Hot Topics

Obstetrics

Magnesium sulfate tocolysis: time to quit

Intravenous magnesium sulfate tocolysis remains a North American anomaly. This therapy rose to prominence based on poor science and the recommendations of authorities. However, a Cochrane systematic review concluded that magnesium sulfate is ineffective as a tocolytic. The review found no benefit in preventing preterm or very preterm birth. Moreover, the risk of total pediatric mortality was significantly higher for infants exposed to magnesium sulfate (relative risk 2.8; 95% confidence interval 1.2–6.6). Given its lack of benefit, possible harms, and expense, magnesium sulfate should not be used for tocolysis. Any further use of magnesium sulfate for tocolysis should be restricted to formal clinical trials with approval by an institutional review board and signed informed consent for participants. Should tocolysis be desired, calcium channel blockers, such as nifedipine, seem preferable.

Grimes DA, Nanda K. Magnesium sulfate tocolysis: time to quit. Obstet Gynecol. 2006 Oct;108(4):986-9.

OB/GYN CCC Editorial

Remove Magnesium Sulfate from your Facility's Tocolysis Guidelines

While this is not news, it is a good reminder that there never has been good randomized data to support the use of magnesium sulfate for tocolysis. In the acute setting Nonsteroidal anti-inflammatory agents such as indomethacin have a better success rate, as measured by lowering the occurrence of low birth weight and prolonging pregnancy.

The online article has a complete explanation, plus alternative medications.

Uterine rupture cannot be predicted with any combinations of clinical factors

RESULTS: We identified 134 cases of uterine rupture and 665 noncases. No single individual factor is sufficiently sensitive or specific for clinical prediction of uterine rupture. Likewise, the 2 clinical predictive indices were neither sufficiently sensitive nor specific for clinical use (receiver operating characteristic curve [area under the curve] 0.67 and 0.70, respectively). CONCLUSION: Uterine rupture cannot be predicted with either individual or combinations of clinical factors. This has important clinical and medical-legal implications.

Macones GA, et al Can uterine rupture in patients attempting vaginal birth after cesarean delivery be predicted? Am J Obstet Gynecol. 2006 Oct;195(4):1148-52.

Gynecology

No Stirrups Preferred for Pelvic Examinations

CLINICAL QUESTION: Do women feel more comfortable and less vulnerable if stirrups are not used as part of a speculum examination?

STUDY DESIGN: Randomized controlled trial (nonblinded)

Synopsis: The embarrassment and fear of discomfort from the speculum examination often prevent women from seeking routine cervical cancer screening. One problem might be the use of stirrups to support the legs of women undergoing a pelvic examination. Stirrups are commonly used in the United States but are not routine in other countries. The authors of this study evaluated whether the use of stirrups increased pain and the feeling of vulnerability in 197 adult women presenting for a routine examination.

The women were randomized to a speculum examination using stirrups or one without stirrups. The stirrups were used to hold the legs at a 30- to 45-degree angle off the table. Women in the no-stirrup group were placed at the end of the table with their heels on the corners of the fully deployed extension of a standard examination table. Women in both groups were fully draped and underwent a standard pelvic examination with the examiner obtaining a cervical smear.

Physical discomfort and sense of vulnerability, measured following the examination using a 100-mm visual analog scale, were significantly lower in the no-stirrup group: the mean physical discomfort score was 43 percent lower (17.2 versus 30.4), and the sense of vulnerability was 44 percent lower (13.1 versus 23.6). Sense of loss of control was not significantly different between the two groups.

The quality of the smears was similar in the two groups. The researchers did not report the comfort of the examiner with either method or how they avoided having the speculum handle hit the table extension. The study was unblinded because the women knew whether they were in stirrups or not. Most of the women had already had one or more speculum examinations; the study would have been more effective had they enrolled women who had never had a pelvic examination using stirrups.

BOTTOM LINE: To decrease discomfort and sense of vulnerability, women undergoing a routine pelvic examination should be offered the option of not using stirrups. On average, women will find this position more comfortable and will feel less exposed. (Level of evidence: 1b)

Seehusen DA, et al. Improving women's experience during speculum examinations at routine gynaecological visits: randomised clinical trial. BMJ July 22, 2006;333:171

Early catheter removal post-op: Early ambulation and early discharge

BACKGROUND: A prospective, randomized study was used to assess whether the immediate removal of an in-dwelling catheter after hysterectomy affects the rate of recatheterization, symptomatic urinary tract infections, time of ambulation, ➔

➔ and hospital stay.

CONCLUSIONS: There could be an association between necessity of recatheterization and the type of surgery (VH) or the type of anesthesia (spinal). Despite recatheterization rate, early removal of in-dwelling catheters immediately after uncomplicated hysterectomy seems to decrease first ambulation time and hospital stay.

Alessandri F, et al A prospective, randomized trial comparing immediate versus delayed catheter removal following hysterectomy. Acta Obstet Gynecol Scand. 2006;85(6):716-20

Child Health

Early adolescents worry more as they age….

They also appear more likely to keep worries to themselves as they go through this stage of development.

The authors found that:

- Adolescents worried weekly most about school grades and least about their friends' problems. There were no significant age or gender differences for total weekly worrying.
- Compared to boys, girls worried weekly more about fitting in at school and about being out of shape or overweight, whereas boys were more likely than girls to have weekly worries about their futures.
- Older students had more weekly worries than younger students about looks or appearance and about being out of shape or overweight. Compared to the youngest students (age 9), the oldest students (age 13) also were more likely to worry about problems at home and about their friends.
- Adolescents who primarily talk to a parent when they are worried were significantly less likely to worry about being liked or fitting in.

Those who said they usually keep their worries to themselves were at greater risk than the referent category for weekly worries about grades.

- Compared to those who turn to parents, those who turn to friends were more likely to have weekly worries about their friends and about being a failure or disappointing loved ones. Those who preferred the Internet for information about what is worrying them were at greater risk for weekly worries about their future but were less likely to worry weekly about grades than those who turned to parents.

This study highlights the need to pay more attention to the ways students attempt to cope with their worries … [and] points to an opportunity to investigate the link between types of adolescent worries and primary sources of worry information utilized by early adolescents.

Brown SL, Teufel JA, Birch DA, et al. 2006. Gender, age, and behavior differences in early adolescent worry. Journal of School Health 76(8):430-437

PEDS CCC Editorial: Steve Holve

Can we develop counseling strategies that make worrying a positive activity?

This article highlights what we suspected; teenagers worry. As healthcare providers what we need is a mechanism to make worrying useful. We already know from behavioral studies that if a patient doesn't see a condition as a problem than they are not ready to change. However, when students do recognize a problem and worry (e.g. "Am I too heavy?" or "Should I really be having sex with three different people?") how can we best use that concern to help teens make healthier lifestyle changes? We all know it is a big step from knowledge to action. It is probably an even bigger step from worry to action. Can we develop counseling strategies that make worrying a positive activity? My only question…. is it as elusive as turning lead into gold?

Overweight Adolescent Girls—Increased Mortality Risk

Childhood obesity is associated with obesity in adulthood, but it is not known if being overweight in adolescence carries an independent risk for premature death. Van Dam and colleagues conducted a prospective cohort study to examine the relationship between body mass index (BMI) at 18 years of age and premature death in women.

CONCLUSIONS: Being overweight at 18 years of age increases the risk of premature death in women, an increase that is independent of their adult weight or lifestyle factors. However, the study did not evaluate information on causes of death, leaving the reasons for increased mortality unclear. Given these findings, the authors recommend that physicians emphasize the primary prevention of overweight in children and adolescents.

Van Dam RM, et al. The relationship between overweight in adolescence and premature death in women. Ann Intern Med July 18, 2006;145:91-7.

Chronic disease and Illness

Health Behaviors among American Indian/Alaska Native Women, 1998–2000 BRFSS

RESULTS: The prevalences of current smoking (27.8%) and obesity (26.8%) were significantly higher among AI/AN women than among all U.S. women. AI/AN women did not meet Healthy People 2010 goals for current smoking, obesity, leisure time physical activity, or binge drinking.

CONCLUSIONS: These data highlight both disparities in health risk behaviors between AI/AN women and all U.S. women and improvements needed for AI/AN women to meet Healthy People 2010 goals. This project demonstrates the overwhelming need for culturally appropriate and accessible prevention programs to address health risk behaviors associated with the leading causes of death among urbanized AI/AN women.

Doshi SR, Jiles R. Health Behaviors among American Indian/Alaska Native Women, 1998–2000 BRFSS, Journal of Women's Health Nov 2006, Vol. 15, No. 8 : 919 -927

Features

ACOG

Umbilical Cord Blood Gas and Acid-Base Analysis

Abstract: Umbilical cord blood gas and acid-base assessment are the most objective determinations of the fetal metabolic condition at the moment of birth. Moderate and severe newborn encephalopathy, respiratory complications, and composite complication scores increase with an umbilical arterial base deficit of 12–16 mmol/L. Moderate or severe newborn complications occur in 10% of neonates who have this level of acidemia and the rate increases to 40% in neonates who have an umbilical arterial base deficit greater than 16 mmol/L at birth. Immediately after the delivery of the neonate, a segment of umbilical cord should be double-clamped, divided, and placed on the delivery table. Physicians should attempt to obtain venous and arterial cord blood samples in circumstances of cesarean delivery for fetal compromise, low 5-minute Apgar score, severe growth restriction, abnormal fetal heart rate tracing, maternal thyroid disease, intrapartum fever, or multifetal gestation.

OB/GYN CCC Editorial

Cord gases at cesarean delivery and vaginal birth: A best practice

This is a best practice that Indian Health facilities should put into all guidelines.

Umbilical cord blood gas and acid-base analysis. ACOG Committee Opinion No. 348. American College of Obstetricians and Gynecologists. Obstet Gynecol 2006;108:1319–22.

Ask a Librarian

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

Want to keep up with evidence-based medicine?

Got time to read 50,000 articles? No? Then take a look at Evidence-Based Medicine. From the editorial offices of the British Medical Journal, this journal provides information gleaned from over 100 journals. Published 6 times a year, the most important and valid research articles are presented. For example, here are two current articles that may be of interest.

Physical exertion during pregnancy

1. Physical exertion at work during pregnancy did not increase risk of preterm delivery or fetal growth restriction. (Evidence-Based Medicine 2006; 11: 156). This prospective cohort study included 1,908 women over 16 years of age who were 24-29 weeks pregnant and stood long hours each week, lifted heavy objects 13 times or more each week, worked nights or worked greater than 46 hour weeks.

Continuous dose vs. 28 day OCs

2. Review: 6 RCTs show similar efficacy and safety for continuous dosing and 28 day combination contraceptive pills. (Evidence-Based Medicine 2006; 11: 53). Randomized controlled trials compared continuous or extended combination oral contraceptives with the traditional dosing (21 days of pills) in women of reproductive age.

To find Evidence-Based Medicine on the HSR Library website, click ONLINE JOURNALS found on the left panel of the homepage. Next click "E" to get to all journals starting with "E" and scan down to the journal.

Diane Cooper cooperd@ors.od.nih.gov

Information Technology

Telehealth Opportunity: Do you need nutrition services at your site?

If your Service Unit, Hospital or Clinic is in need of nutrition services or diabetes education services by a Registered Dietitian/Certified Diabetes Educator, please consider an exciting and innovative approach to providing these services through Telehealth.

If you currently have (or plan to soon have) teleconferencing availability, the IHS Native American Cardiology Program would be interested in potentially working in partnership with you to assist in providing these services. If you are interested, please see the attached documents.

For further information or questions, you may also directly contact our program dietitian, Diane Phillips, RD, LD, CDE at diane.phillips@ihs.gov or by phone at (928) 214-3920.

Alaska State Diabetes Program

Barbara Stillwater

Gestational Diabetes Linked to High Prevalence of Periodontal Disease

RESULTS: In pregnant women, the prevalence of periodontitis was 44.8% in women with GDM and 13.2% in nondiabetic women, with adjusted odds ratio (aOR) of 9.11 (95% confidence interval [CI] 1.11-74.9). In nonpregnant women, the prevalence of periodontitis was 40.3% in women with type 1 or 2 diabetes, 25.0% in women with previous history of GDM, and 13.9% in nondiabetic women, with aOR of 2.76 (1.03-7.35) for women with type 1 or 2 diabetes.

CONCLUSION: We found an association between periodontal disease and GDM.

Editorial comment: Todd Smith, DDS, MSD IHS Periodontal Consultant

It is not surprising that there was a significant, positive association between periodontitis and GDM. Both pregnancy and diabetes are associated with increased inflammation in the gums and tissues surrounding the teeth. The same microvascular changes occurring throughout the body in patients with diabetes (ie formation of advanced glycation end products, increased cross linking of collagen and accumulation in blood vessel walls, vascular smooth muscle proliferation with narrowing of the lumen, poor oxygenation and perfusion) occurs in the periodontal tissues. Taylor (2004) reported in a review of 55 studies involving subjects with dm that there was consistent evidence of greater periodontitis prevalence, incidence, severity, and progression. This relationship appears to be bidirectional, with the chronic, gram-negative anaerobic infection of periodontitis perpetuating a systemic inflammatory state with a resultant increase in insulin resistance and aggravation of glycemic control. This is supported in treatment studies where treatment of periodontitis has been associated with significant drops in HbA1c.

The same may be true for pregnancy and periodontitis. The systemic inflammation associated with periodontitis, with bacteremia and increases in PgE_2, TNF-α, Il-1 and –6, and CRP, has been associated with adverse pregnancy outcomes such as PTB, LBW, and preeclampsia (Offenbacher, Jeffcoat, Boggess, Radnai, and others). Some studies have demonstrated a decrease in prevalence of adverse pregnancy outcomes with periodontal therapy during the second trimester; the most recent in the NEJM did not. A larger multicenter periodontal treatment study with 1800 patients is ongoing and due to be published within 2 years. In the meantime, if your patients are having trouble controlling their blood sugar, or are pregnant, look in their mouths to see how healthy the gums look. Expectant mothers should be counseled in the importance of oral health, and referral to a dentist is strongly recommended.

Xiong X, et al Periodontal disease and gestational diabetes mellitus. Am J Obstet Gynecol. 2006 Oct;195(4):1086-9

Other references online

ACOG

Menstruation in Girls and Adolescents: Using the Menstrual Cycle as a Vital Sign

ABSTRACT: Young patients and their parents often are unsure about what represents normal menstrual patterns, and clinicians also may be unsure about normal ranges for menstrual cycle length and amount and duration of flow through adolescence. It is important to be able to educate young patients and their parents regarding what to expect of a first period and about the range for normal cycle length of subsequent menses. It is equally important for clinicians to have an understanding of bleeding patterns in girls and adolescents, the ability to differentiate between normal and abnormal menstruation, and the skill to know how to evaluate young patients' conditions appropriately. Using the menstrual cycle as an additional vital sign adds a powerful tool to the assessment of normal development and the exclusion of serious pathologic conditions.

Menstruation in girls and adolescents: using the menstrual cycle as a vital sign. ACOG Committee Opinion No. 349. American Academy of Pediatrics; American College of Obstetricians and Gynecologists. Obstet Gynecol 2006;108:1323–8.

STD Corner

Lori de Ravello, National IHS STD Program

IHS Consent Form for an HIV Antibody Test is Hereby Cancelled

On September 22, 2006, the Center for Disease Control (CDC) issued revised recommendations for HIV testing of adults, adolescents, and pregnant women in health care settings. The recommendations for patients in all health-care setting is that a separate written consent for HIV testing should not be required; general consent for medical care should be considered sufficient to encompass consent for HIV testing. To remove any barriers in implementing the CDC recommendations, IHS Form 509*, previously required by the IHS as a separate and specific patient consent form for an HIV antibody test, is hereby cancelled and no longer recommended. If a facility chooses to implement these recommendations and is within state guidelines, patients still must be informed orally or in writing (and documented) that HIV testing will take place—unless they decline the test (opt-out screening). Cancellation of Form 509 does not mean IHS mandates full implementation of CDC recommendations. Rather, it has removed an existing form that may create a barrier within IHS to implementing more streamlined processes for HIV testing. Depending upon individual state guidelines and relationships, local facilities may choose to fully or partially implement all or some of CDC recommendations. More time is needed this year to assess how these recommendations are adopted at the state level and how CDC will identify and manage implementation barriers and challenges.

Full story on CDC HIV Revised Recommendations, October CCC Corner

www.ihs.gov/MedicalPrograms/MCH/M/obgyn1006_AOM.cfm

Wonder what your State consent requirements are?

www.ucsf.edu/hivcntr/

If you should have questions regarding the CDC recommendations and/or IHS policy and guidelines on HIV testing, please contact CDR Scott Giberson, National IHS HIV/AIDS Principal Consultant, by phone at (301) 443-4644 or by e-mail at Scott.Giberson@ihs.gov

Adapting condoms to community values in Native American communities: Snag bags

HIV/AIDS researchers working among Native Americans have consistently noted resistance to discussions of sexuality and the distribution of condoms. This resistance is inspired by long held values about shame and public discussions of sexuality. Also, American Indians have been reluctant to welcome public discussions of HIV/AIDS and sexuality from external entities, such as governmental agencies. As a result, Native peoples have some of the lowest documented condom use rates. However, innovations in culturally integrating condoms and safe sex messages into Native cultural ideals are proving beneficial. One such innovation is the snag bag, which incorporates popular Native sexual ideology while working within local ideals of shame to distribute condoms and safe sex materials to sexually active young people and adults. Using snag bags as an example, this research proposes that an effective approach to HIV prevention among Native peoples is not cultural sensitivity but cultural integration. That is, HIV prevention strategies must move beyond the empty promise of merely culturally-sensitizing ideas about disease cause. Instead of simply 'translating' HIV/AIDS programming into Native culture, prevention strategies must be integrated by Native peoples into their own disease theories and contemporary

Gilley BJ. 'Snag bags': Adapting condoms to community values in Native American communities. Cult Health Sex. 2006 Nov-Dec;8(6):559-70.

Navajo News

Jean Howe, Chinle

Prevalence of diabetes: Diagnosed Diabetes Among AI/AN Aged <35 Years

This report was based on a CDC analysis of Indian Health Service data and revealed that the age-adjusted prevalence of diabetes among American Indians and Alaska Natives (AI/AN) aged <35 increased from 8.5 to 17.1 per 1000 among the 60% of AI/AN who use IHS facilities for care. The analysis also indicated that the number of AI/AN aged <35 with diabetes diagnosed by IHS more than doubled in the decade under study (from 6,001 in 1994 to 12,313 in 2004). Importantly, the annual percentage change (APC) of diagnosed diabetes was greatest among females aged 25-34 years of age (9.1%).

The accompanying discussion notes that this dramatic increase could be due to an increased incidence of diabetes or increased screening for diabetes or both. As the editor points out, the extraordinary increase in diabetes in reproductive age women is especially concerning as the offspring of women with diabetes are at increased risk for having diabetes themselves as well as for congenital anomalies and perinatal morbidity and mortality. The long-term health consequences of early-onset diabetes are particularly daunting.

MMWR November 10, 2006/55(44);1201-1203

Perinatology Picks

Adverse neonatal outcomes associated with antenatal dexamethasone vs betamethasone

CONCLUSIONS: Betamethasone was associated with a reduced risk for neonatal death, with trends of decreased risk for other adverse neonatal outcomes, compared with dexamethasone. It may be in the best interest of neonates to receive betamethasone rather than dexamethasone when available.

Lee BH, et al Adverse neonatal outcomes associated with antenatal dexamethasone versus antenatal betamethasone. Pediatrics. 2006 May;117(5):1503-10

International Health Update

Claire Wendland, Madison, WI

Anthropology in the clinic: the problem of cultural competency and how to fix it

The article I've chosen to review this month is not specifically about international health. Instead, it's a relevant piece for anyone working in cross-cultural settings—or perhaps any clinical settings at all—abroad or at home. Arthur Kleinman, the lead author, is a well known medical anthropologist whose pioneering work on cultural variation and "explanatory models" of disease was adapted into many medical and nursing school curricula. In an article in last month's PLoS Medicine, he critiques current models of "cultural competency" and suggests alternatives for high-quality, culturally sensitive clinical care.

So what's wrong with the cultural competency model? Kleinman and his co-author Benson see several problems. First, no rigorous research shows it to improve clinical care, though training programs have been widely implemented. Second—and to the authors clearly more seriously—"culture" itself becomes another area of technical skill for the clinician, rather than the lived experience in which we (just as much as our patients) are immersed. This approach allows us to overlook the culture of biomedicine and its powerful effect on our interactions with patients. Instead, culture becomes something that belongs to other people, and that can be reduced to a bullet-point list of typical traits, dos and don'ts, or barriers to care. Patients on the receiving end of this approach, the authors note, may feel intruded upon, stereotyped or stigmatized. Finally, as the authors illustrate through several case examples, cultural features are simply not always central to clinical problems of "compliance" or communication. Family issues, personal concerns, and economic constraints may be much more salient in any given situation.

The article is strong on the critique of cultural competency models, and articulates succinctly several concerns that have been corridor talk in medical and anthropological circles for some time. Where it is less strong is in the matter of pragmatic solutions. Kleinman and Benson agree that clinicians should try to be sensitive to culture, and suggest that we attempt to see culture from a more anthropological perspective: as a way of experiencing and interpreting the world that is flexible, dynamic, and often highly variable among individuals, rather than static and wholly predictable on the basis of ethnic group memberships. This anthropological view should allow clinicians to determine what is at stake for any given patient in the course of illness and its treatment. To this end, they develop a six-step model for eliciting patients' experience (what they call a mini-ethnography) that simply seems to me impractical for the busy clinic setting in which most of us work. Perhaps it might be usefully adapted for more prolonged encounters or problem cases? Take a look and see what you think; you can find the article at:

www.plosmedicine.org.

Kleinman A, Benson P Anthropology in the clinic: the problem of cultural competency and how to fix it. PLoS Medicine 3(10):e294, October 2006

Menopause Management

Alendronate May Be Best Choice for Postmenopausal Osteoporosis

CONCLUSIONS: Patients receiving 70 mg OW alendronate had greater gains in BMD, were more likely to maintain or gain BMD, and had greater reductions in bone turnover markers than patients receiving 35 mg OW risedronate after 24 months, with no differences in upper gastrointestinal tolerability.

Bonnick S, et al Comparison of weekly treatment of postmenopausal osteoporosis with alendronate versus risedronate over two years. J Clin Endocrinol Metab. 2006 Jul;91(7):2631-7

Medical Mystery Tour

The words 'bizarre' and 'atypia' in the same pathology report sentence… hmmm….

To recap…

We discussed a 53 yo G6 P5015 who presented to a field facility with ongoing menometrorrhagia despite conservative therapy with medroxyprogesterone 10 mg for 10 days a month for 3 months. Initial ultrasound revealed a 2.7 x 2.4 cm endometrial structure felt to be consistent with an endometrial polyp or a leiomyoma.

The patient subsequently received an uncomplicated total vaginal hysterectomy with a left salpingo-oophorectomy. The patient was discharged on the second post operative day.

The Pathologist's initially commented that evaluation revealed cytologic atypia present throughout the neoplasm that was of a degenerative and bizarre type. Occasional mitotic figures were identified. No tumor type necrosis was seen. The increased cellularity was felt to be somewhat increased over what one normally sees in a highly cellular leiomyoma. The pathologic material was sent to a second facility for pathologic re-evaluation and the above impression was confirmed.

What did you think this patient's diagnosis was?

The second pathologic evaluation revealed:

Submucosal atypical leiomyoma with features of symplastic leiomyoma, benign….deeply penetrating adenomyosis. There was a comment that it was a symplastic leiomyoma, rather than a leiomyosarcoma. It was unusually cellular for this enitity, prompting the staff to qualify it as an atypical symplastic leiomyoma, but it is placed in a benign category. The term atypia underlined the need for follow-up.

So, what is a symplastic leiomyoma?

The term symplastic just refers to pleomorphic, atypical, or bizarre leiomyomas have a wider range of morphologic changes and mitotic activity than previously documented. Grossly, nothing typically distinguishes a symplastic leiomyoma from the usual type of leiomyoma. Microscopically, there are foci of bizarre and pleomorphic tumor cells with atypical nuclei.

This smooth-muscle tumor is defined by the presence of variable numbers of smooth-muscle cells with multiple, gigantic nuclei with abundant nuclear chromatin in an otherwise typical leiomyoma. Mitotic figures are often lacking, but up to 7 per 10 hpf have been reported. They are, however, never atypical.

What is the risk of recurrence?

All symplastic leimyomas are benign. The recognition of this leiomyoma variant is critical, as the marked nuclear atypia can lead to an incorrect diagnosis of leiomyosarcoma. These lesions have a high cure rate with surgery alone (only one of 46 patients failed in the Stanford series and are considered a variant of usual (benign) leiomyoma.

If your learning curve isn't steep enough at this point, then I just want to add this common sense truism… **"the third time is a charm."**

I was a little uneasy about the words …'The atypia just underlines the need for follow-up'… because it was not clear what other follow-up might be needed for a benign lesion…so I requested the slides be sent to a third center for evaluation.

The third center's preliminary diagnosis is leiomyosarcoma and at this time the patient is being notified to return for computerized tomography of the chest, abdomen, and pelvis.

The median age for women with leimyosarcoma (43-53 years) is somewhat lower than that for other uterine sarcomas, and premenopausal patients have a better chance of survival.

The recurrence rate is based on the amount of mitotic activity: less than 5 mitotic figures per 10 high power fields is 98% 5 year survival; 5- 10 MF/ 10HPF is unpredictable at 42%; and greater than 10 is poor at 15%. More clinical background is available online.

Resources

Robboy, SJ et al Pathology and Pathophysiology of Uterine Smooth-Muscle Tumors Environmental Health Perspectives Supplements Volume 108, Number S5, October 2000

The current pregnancy loss rate after amniocentesis is closer to 1 in 1,600

CONCLUSION: The procedure-related fetal loss rate after midtrimester amniocentesis performed on patients in a contemporary prospective clinical trial was 0.06%. There was no significant difference in loss rates between those undergoing amniocentesis and those not undergoing amniocentesis. LEVEL OF EVIDENCE: II-2.

Eddleman KA, et al Pregnancy Loss Rates After Midtrimester Amniocentesis. Obstet Gynecol. 2006 Nov;108(5):1067-1072.

Midwives Corner

Lisa Allee, CNM, Chinle

What Women Want

The Journal of Midwifery and Women's Health September/October issue has two more wonderful qualitative research articles (see my review of another in the October CCC Corner.) These two studies gather information about women's experience in early labor at home and their perceptions during pregnancy of what would be a good birthing experience. The sample sizes are small and the populations specific, but the quotes ring with the universal experience of pregnant and birthing women. For example, Beebe's and Humphreys' interviews with nulliparous included these:

- "It's interesting because the contractions (that) were described to me in class, or the way I interpreted them, didn't feel the way I felt when I…it just felt more like cramps. I don't know, the two just didn't go together for me. They didn't' feel the way I was expecting them to."
- "My body was just moving me around"
- "The only thing I worried about was going to the hospital maybe too soon…I just thought it would be bad if we get there only to be told to go back home, It would be discouraging."

Melender's interviews produced these quotes about staff:

- "Of course I wish that…mmmhh…the midwife would be a caring person who sees the patient as a human being and not just a patient…takes her character into account."
- "That the midwife would be a person who listens to you…and not such a difficult one (and describing what she meant by difficult:) well, if for example, I ask for something, she won't do it or if I ask for something, she'll snap at me….I mean that the atmosphere shouldn't be in any way tense or like that….I mean that the midwife and obstetrician should be nice."

These articles remind us to tune into what women are experiencing and wanting. Beebe's and Humphreys' encourage us to be sensitive to what women are going through before they come in to hospital-- their doubt about how to tell if they are in labor and the anxiety about and disappointment in finding out that they are not in active labor. This should inspire us to teach as clearly as possible what early and active labor are like and to be readily available to provide reassurance, guidance, support, and encouragement over the phone and during labor checks. Melender's article reminds us of the importance of our relationship with women in labor, for example, being kind, nice, welcoming, empathetic, and accepting of her as she is, and how we can create an atmosphere conducive to birthing by including things like an unhurried atmosphere, normality, and security.

Expectations, perceptions, and management of labor in nulliparas prior to hospitalization, Beebe, K, Humphreys, J. J Midwifery Women's Health. 2006 Sep-Oct;51(5):347-53.

What constitutes a good childbirth? A qualitative study of pregnant Finnish women Melender, H-L, J Midwifery Women's Health. 2006 Sep-Oct;51(5):331-9

Primary Care Discussion Forum

December 1, 2006

Causes of Type 2 Diabetes: Old and New Understandings

Moderator: Ann Bullock M.D.

In 2002, the International Diabetes Federation determined that the medical literature supports 4 etiologies of type 2 diabetes:

- Genetics
- Fetal Origins
- Lifestyle
- Stress

We will explore these issues:

- Diabetes prevention programs focus on lifestyle modification—what might these programs look like if lifestyle is only one factor?
- What else can be learned from the DPP (Diabetes Prevention Program)?
- Pregnancy and early life risk factors
- What are the particular roots of the diabetes and obesity epidemics in Indian Country

Subscribe to the Primary Care listserv

www.ihs.gov/cio/listserver/index.cfm?module=list&option=list&num=46&startrow=51

Other

From Zelda Collett-Paule, CNM, ANMC

Delayed cord clamping: Benefits in settings with high levels of neonatal anemia

METHODS: This was a randomized, controlled trial performed in 2 obstetrical units in Argentina on neonates born at term without complications to mothers with uneventful pregnancies.

CONCLUSIONS: Delayed cord clamping at birth increases neonatal mean venous hematocrit within a physiologic range. Neither significant differences nor harmful effects were observed among groups. Furthermore, this intervention seems to reduce the rate of neonatal anemia. This practice has been shown to be safe and should be implemented to increase neonatal iron storage at birth.

Ceriani Cernadas JM et al. The effect of timing of cord clamping on neonatal venous hematocrit values and clinical outcome at term: a randomized, controlled trial. Pediatrics. 2006 Apr;117(4)

Here is except from the Cochrane Review in preterm infants

Authors' conclusions: Delaying cord clamping by 30 to 120 seconds, rather than early clamping, seems to be associated with less need for transfusion and less intraventricular haemorrhage. There are no clear differences in other outcomes.

OB/GYN CCC Editorial

Use caution when fixing a problem that is not broken

Luckily the days of significant problems with neonatal anemia among AI/AN are in the past. I say this because that era was also associated morbidity and mortality rates that approached those still seen in the lowest resource developing countries today.

Hence, for those of you who work in developing countries, Cernadas et al adds a randomized controlled trial to the growing literature that had previously been reported in pre-term infants. Currently in AI/AN we are more likely to see problems associated with polycythemia, than widespread neonatal anemia.

The key will be to rationally apply this practice in a setting where the problem neonatal anemia does not exist because delay cord clamping can be associated with adverse effects from the NeoReview listed below

1 respiratory—grunting, tachypnea
2 hyperviscosity/plethora—tachypnea, cyanosis, plethora, apnea, neurologic depression, cardiomegaly, pulmonary congestion, edema, pleural effusion, irritability

Why is immediate clamping current practice?

See 5 reasons stated on page 10 in the NeoReview referenced below.

One would need a good indication to set up an AI/AN term infant for the exchange transfusions, NICU admission to treat hyperviscosity syndrome. There are indications for exposing term infants to that risk in those areas of the developing world where early infant anemia is a public health problem, just not in Indian Country at this time. More background online.

Phillip AG et al When should we clamp the umbilical cord? NeoReviews Vol.5 No.4 2004 e142

Menopause Management

High-Dose Gabapentin Equal to Estrogen for Hot Flashes: POEM

Clinical Question: Is high-dose gabapentin (Neurontin) as effective as usual-dose estrogen for the treatment of postmenopausal hot flashes?

Study Design: Randomized controlled trial (double-blinded)

Synopsis: The authors recruited menopausal women 35 to 60 years of age who each had at least 50 moderate to severe hot flashes weekly for at least two months. Any treatments for hot flashes, including hormones, were discontinued for at least one month before enrollment in the study. Sixty women were randomized to gabapentin 2,400 mg daily, conjugated equine estrogen 0.625 mg daily, or placebo. The gabapentin was titrated over 12 days to a total of two 400-mg capsules three times daily.

Women recorded their hot flashes in a diary and indicated the severity of each one on a visual analog scale (1 = mild, 4 = severe). The number of hot flashes was multiplied by the severity of each over the course of a week to obtain a composite hot flash score. The composite scores at 12 weeks were compared with baseline scores. The gabapentin group had a mean reduction of 71 percent, the estrogen group had a mean reduction of 72 percent, and the placebo group's score dropped 54 percent ($P < .017$ for each active treatment versus placebo). There was no statistical difference between the gabapentin and estrogen groups. Five women dropped out during the study, including one in the gabapentin group because of side effects.

Bottom Line: In this small study, high-dose gabapentin was as effective as the usual dose of conjugated equine estrogens for the treatment of menopausal vasomotor symptoms. Larger studies are needed to confirm this result.

(Level of evidence: 1b)

Study Reference: Reddy SY, et al. Gabapentin, estrogen, and placebo for treating hot flushes: a randomized controlled trial. Obstet Gynecol July 2006;108:41-8.

Breastfeeding

Suzan Murphy, PIMC

It is official, breastfeeding counts

Obesity is a rapidly escalating problem that could greatly complicate health care in the future. Finding effective ways that reduce obesity and maintain healthy weight are major challenges for health care providers and planners. But research suggests that there is hope—in numerous studies, breastfeeding has been linked with reduced obesity risk throughout childhood and into early adulthood. Additionally, breastfeeding exclusivity and duration are recognized to be inversely related to obesity risk.

Given the current widespread obesity problem and the research that breastfeeding can reduce obesity risk, a GPRA measure has been born. Beginning in 2007, baseline breastfeeding data at specific ages will be established in I.H.S. country—with the goal of increasing breastfeeding incidence and duration in the first year of life.

It will take numbers to establish baseline data and monitor early feeding practice. The good news is that feeding choice data can now be captured in RPMS *and* the questions are those already routinely asked by providers in the patient's first year of life. Using a software patch available to all service units, feeding choice can be indicated at patient visits by PCC, PCC +, and E.H.R. in 2007, than inputted by data entry, and tracked by a V-gen search.

The software patch allows any provider to check one of five feeding choices - exclusively breastfeeding, mostly breastfeeding, ½ and ½ , mostly formula and exclusively formula. The possible confounders that can also be tracked are parity, birth weight, mother's name/chart number, when solids were started, when breastfeeding stopped, and when regular formula feeding began.

I.H.S. has unique health care records—often spanning entire lifetimes. No other national health care environment provides care for an individual from conception throughout their life. There are limitless opportunities to learn from health behavior/management to improve life long care. How early feeding choice impacts later years is only the beginning.

Please watch for more information about the new GPRA measure and objectives related to breastfeeding. Specific information will be available soon at the I.H.S. MCH Breastfeeding web site, www.ihs.gov/MedicalPrograms/MCH/M/bf.cfm

Perinatology Picks

George Gilson, MFM, ANMC

Be Prepared: The Boy Scout motto…er…the Maternity Care Provider motto, too

CONCLUSION: These data demonstrate that most emergent cesarean deliveries develop during labor in low-risk women and cannot be anticipated by prelabor factors. The outcomes demonstrate that infants are at risk in these clinical situations and suggest that strategies to improve performance in these clinical situations are important.

Lagrew DC, et al Emergent (crash) cesarean delivery: indications and outcomes. Am J Obstet Gynecol. 2006 Jun;194(6):1638-43; discussion 1643

Editorial comment: George Gilson, MFM, ANMC Emergency drills are a good thing….for your L/D team, and for your JCAHO accreditation

Our system expends a large amount of time and effort on ACLS and NRP that maternity care providers infrequently apply, yet 1:159 deliveries is a "crash section" that we aren't prepared for, and subsequent neonatal outcomes are often poor.

Lagrew DC, et al, above, reviews the new "15 minute rule", skipping asepsis, Foley, importance of the clinical team 'in house', that only 13% of them were associated with VBAC attempts despite the disproportionately strict VBAC recommendations from our professional organizations, need for staff drills for cord prolapse, etc…a lot of practical information for small and large facilities.

The Advanced Life Support in Obstetrics (ALSO) model could be helpful if applied in this setting.

Predicting glyburide failure is difficult, not associated with adverse pregnancy outcomes

RESULTS: Of the 235 gestational diabetics identified, 79% of the 101 A2DMs were successfully treated with glyburide as first-line therapy. Those that failed had a higher mean glucose value on glucose challenge test (GCT) (200.5 +/- 57.3 vs 176.6 +/- 33.8 mg/dL, P = .019) and were more likely to have a GCT > or = 200 mg/dL (45 vs 22%, P = .043). Only GCT and GCT > or = 200 mg/dL were predictive of failure.

CONCLUSION: Predicting glyburide failure is difficult, but failure does not appear to be associated with increased adverse pregnancy outcomes.

Rochon M, et al Glyburide for the management of gestational diabetes: risk factors predictive of failure and associated pregnancy outcomes. Am J Obstet Gynecol. 2006 Oct;195(4):1090-4.

Oklahoma Perspective

Greggory Woitte—Hastings Indian Medical Center

Preoperative Evaluation

As we often deal with very healthy patients in our specialty, it is good to remind ourselves that surgery, even in healthy patients, can have serious consequences. Fortunately, the majority of the time healthy patients have very uneventful surgical procedures, but occasionally what we perceive as a healthy patient may have risk factors that may cause us to take additional precautions prior to surgery. A preoperative questionnaire can identify those at risk and can be as useful as a detailed history and physical. A modified questionnaire

- Do you feel unwell?
- Have you ever had any serious illnesses in the past?
- Do you get any more short of breath on exertions than other people of your age?
- Do you have any coughing?
- Do you have any wheezing?
- Do you have any chest pain on exertion (anginal type)?
- Do you have any ankle swelling?
- Have you taken any medicine or pills in the last 3 months including excess alcohol?
- Have you any allergies?
- Have you had an anesthetic in the last 2 months?
- Have you or your relatives had any problems with a previous anesthetic?
- Observation of serious abnormality from "end of bed" which might affect anesthetic?
- What is the date of your last menstrual period?

Recommended lab tests for the preoperative evaluation of the healthy patient include:

- Pregnancy test
- Hematocrit for surgery with expected major blood loss
- Serum creatinine if major surgery, hypotension expected, nephrotoxic drugs to be used or >50 yrs

Other lab tests such as LFTs, routine UA, blood glucose have little if any predictive value of pre or postoperative performance EKGs should be obtained on: (within 1 month of surgery)

- all women >55 years,
- known cardiac disease,
- clinic eval. suggestive of cardiac disease, patient at risk of electrolyte abnormality,
- systemic disease associated with possible unrecognized heart disease (DM or HTN)

Chest x-ray (within 6 months of surgery) for patients over 60 years or those with suspected cardiac or pulmonary disease.

Adapted from Wilson, ME, Williams, MB, Baskett, PJ, et al, Br Med J 1980; 1:509

Nurses Corner

Sandra Haldane, HQE

Exclusively for Nurses: IHS has a Biomedical Librarian/ Informationist dedicated to I/T/U

Please pass this information on to all nursing staff. IHS has a clinical Biomedical Librarian/Informationist dedicated to IHS (I/T/U) nursing staff. Judith Welsh, RN, MLS is available via email on the global or per her contact phone below to assist nurses with literature searches or other NIH Library information needs. IHS pays NIH Library yearly for the support of informationists so please take advantage of their assistance. If you do a literature search and find that you need document retrieval because the Library does not carry the document, interlibrary loans and retrieval are free of charge to you. Please go to Judith's link below to access the NIH Library for searching and PLEASE call or email Judith should you require any assistance. She will walk you through searches if need be and believe me she knows the in's and out's of searching the various databases.

Judith Welsh, RN, MLS welshju@ors.od.nih.gov
Health Services Research Library Phone: 301.594.6211

Executive Nurse Fellows Program, Robert Wood Johnson

Below is information regarding the Robert Wood Johnson Executive Nurse Fellow's Program. This program is exceptional at developing leadership skills. Deadline for application is Feb. 2007.

Please take a look at the information and consider applying or passing along to a colleague who is an up and coming executive health care leader or should be. Thanks, Sandy

The National Program Office is pleased to announce the launch of the online application for the 2007 cohort of the RWJ Executive Nurse Fellows Program.

Details about the application process are available at the link below and the deadline for completed online applications is February 1, 2007. Please share this information with colleagues who you think would make great Fellows.

Contact Sally Durgan, 415-502-4594, sdurgan@thecenter.ucsf.edu

SAVE THE DATES

22nd Annual Midwinter Indian Health OB/ PEDS Conference

- For providers caring for Native women and children
- January 26–26, 2007
- Telluride, CO
- Contact Alan Waxman at: awaxman@salud.unm.edu

2nd International Meeting on Indigenous Child Health

- April 20–22, 2007
- Montreal, Quebec, Canada
- Solutions, not Problems
- Joint meeting of IHS, AAP-CONACH, First Nations and several other stakeholders
- www.aap.org/nach/2InternationalMeeting.htm

2007 Indian Health MCH and Women's Health National Conference

- August 15–17, 2007
- Albuquerque, NM
- THE place to be for anyone involved in care of AI/AN women, children
- Internationally recognized speakers
- Save the dates. Details to follow
- Want a topic discussed? Contact: nmurphy@scf.cc

Abstract of the Month

- Regular Cola Intake Reduces Bone Mineral Density in Women

IHS Child Health Notes

- Tall girls: the social shaping of a medical therapy.
- Prevalence and comorbidity of mental disorders among American Indian children in the Northern Midwest.

From Your Colleagues

- Brenda Neufeld, Sells—Fish Intake, Contaminants, and Human Health
- Dawn Wyllie, Bemidji Area—• Perinatal depression evidence based care
- Judy Thierry—Depression, focused on moms who present during a child health visit

Hot Topics

- Obstetrics—
- Magnesium sulfate tocolysis: time to quit
- Uterine rupture cannot be predicted with any combinations of clinical factors
- Gynecology—
- No Stirrups Preferred for Pelvic Examinations
- Early catheter removal post-op: Early ambulation and early discharge
- Child Health—Early adolescents worry more as they age….
- Chronic disease and Illness—Health Behaviors among American Indian/Alaska Native Women, 1998–2000 BRFSS

Features

- ACOG—Umbilical Cord Blood Gas and Acid-Base Analysis
- Alaska State Diabetes Program—Diabetes & High Prevalence of Periodontal Disease
- Navajo News—Diagnosed Diabetes Among AI/AN Aged <35 Years
- STD Corner—IHS Consent Form for an HIV Antibody Test is Hereby Cancelled
- Perinatology Picks—Adverse neonatal outcomes associated with antenatal dexamethasone vs betamethasone
- International Health Update—the problem of cultural competency and how to fix it
- Midwives Corner—What Women Want

And much, much, more

Neil Murphy, MD
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