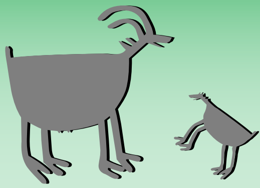

NATIONAL COUNCIL OF CHIEF CLINICAL CONSULTANTS

CCC CORNER

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

Vol 4, No 05
May 2006

Maternal periodontal disease in early pregnancy:
Small-for-gestational-age infant

OBJECTIVE: The objective of the study was to determine whether periodontal disease is associated with delivery of a small-for-gestational-age infant.

STUDY DESIGN: In a prospective study of oral health, periodontal disease was categorized as health, mild, or moderate/severe on the basis of clinical criteria. Small for gestational age was defined as birth weight less than the 10th percentile for gestational age. A risk ratio (95th percentile confidence interval) for a small-for-gestational-age infant among women with moderate or severe periodontal disease was calculated.

RESULTS: Sixty-seven of 1017 women (6.6%) delivered a small-for-gestational-age infant, and 143 (14.3%) had moderate or severe periodontal disease. The small-for-gestational-age rate was higher among women with moderate or severe periodontal disease, compared with those with health or mild disease (13.8% versus 3.2% versus 6.5%, $P < .001$). Moderate or severe periodontal disease was associated with a small-for-gestational-age infant, a risk ratio of 2.3 (1.1 to 4.7), adjusted for age, smoking, drugs, marital and insurance status, and pre-eclampsia.

CONCLUSION: Moderate or severe periodontal disease early in pregnancy is associated with delivery of a small-for-gestational-age infant. Understanding the mechanism of periodontal disease-associated adverse pregnancy outcomes could lead to interventions to improve fetal growth.

Boggess KA, Beck JD, Murtha AP, Moss K, Offenbacher S. Maternal periodontal disease in early pregnancy and risk for a small-for-gestational-age infant. Am J Obstet Gynecol. 2006 May;194(5):1316-22.

Comments: IHS Periodontal Consultant Todd Smith, Phoenix

This large prospective study supports prior research in this field; that is, periodontitis (gum disease) is associated with increased risk for adverse pregnancy outcomes, including preterm birth, low birth weight infants, and preeclampsia. The dose response relationship here is of particular interest; the worse the periodontitis the greater the likelihood of a small-for-gestational-age infant. This ongoing research is also investigating the effects of periodontal treatment on the pregnancy outcome of expectant mothers. Smaller studies have found that "deep cleanings" can reduce the risk of preterm and/or low birth weight infants, probably by decreasing the chronic inflammation and infection associated with periodontitis. Results should be published in 2007.

For additional information on periodontitis and adverse pregnancy outcomes, check the web link **www.perio.org/consumer/ftm.html** *and click on "Gum Disease Linked to Pregnancy Complications" and the Archived Press Releases "Periodontal Disease and Overall Health."*

CCC Editorial

Maternal periodontal disease is a chronic exposure to oral pathogens that may represent a treatable condition that contributes to impaired in utero fetal growth. It appears there may be an association, but we need to prove causation. We need an appropriately powered treatment RCT to see if intervention makes any difference. We should be mindful of other recent trends in preterm labor management, e.g., antibiotic therapy of BV / vaginitis in patients in PTL or patients with prior Preterm birth, in which there was ultimately no difference in outcome.

THIS MONTH

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Out with the Winter Solstice icy blue and in with the verdant green for the Vernal Equinox. Twice a year, day and night become equal in length. The ancient goddess, Eostre, a Saxon deity of new life and fertility, was the key symbol of the Ostara celebration which became Easter.

Also on-line....

This is a digest of the monthly Obstetrics and Gynecology Chief Clinical Consultant's Newsletter which is available on the Internet at: **www.ihs.gov/MedicalPrograms/MCH/M/OBGYN01.cfm**

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Neil J. Murphy

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

IHS Child Health Notes

May 2006

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

"It ain't what people don't know that's so dangerous, it's what people know that just ain't so."
—Will Rogers*

*Editor's Note – Yes, this was also the quote last month, but it is so good, and so germane to this month's reviewed articles, that I am using it again.

Articles of Interest

Controlled delivery of high vs. low humidity vs. mist therapy for croup in emergency departments: a randomized controlled trial. JAMA. 2006 Mar 15;295(11):1274-80.

Humidified air doesn't improve croup scores—end of story

Editorial Comment

Everyone knew that humidity improves croup – especially your grandmother. Humidity has long been used as a treatment for croup: from boiling kettles and sitting in the shower at home to blow-by humidity and mist tents in hospital. Mild croup often waxes and wanes spontaneously. Telling parents to go in the shower or turn on the humidifier gave pediatricians something to say and parents something to do while waiting spontaneous improvement to occur.

The authors of this study are taking away our placebo.

They gave humidity every chance to succeed: they even optimized water particle size so that water vapor would reach the subglottic space, something that regular humidified air doesn't do. All for naught. Humidified air provided no statistical or clinical improvement. The authors also point out that there is some downside to humidity, especially croup tents, which make it difficult to monitor ill children. The authors do recommend proven treatments such as steroids and inhaled epinephrine.

Article of Interest

Fluoroquinolone use in children. Pediatr Infect Dis J. 2006 Mar;25(3):257-8.

- Quinolones have been associated with cartilage damage in beagle pups
- Babies are not beagles but most physicians were reluctant to use this class of antibiotics in children despite their proven efficacy
- A review of multiple studies with thousands of children shows no link in humans between quinolones and joint injury.

Editorial Comments

For years they told us that beagle pups got cartilage damage from quinolone antibiotics and that no baby could be guaranteed joint safety.

This review highlights the effectiveness of this class of antibiotics and possible pediatric uses. The authors suggest that there are instances in which quinolones may be the best antibiotic for your patient: Pseudomonas infections, complicated otitis media, resistant gram negative infections and multi-drug resistant meningitis.

Infectious Disease Updates.

Rosalyn Singleton, MD, MPH

Which Hib Vaccine?

Invasive Haemophilus influenzae type B (Hib) disease occurred at a higher rate and younger ages in many American Indian/Alaska Native populations before Hib vaccine. Now Hib vaccine has led to near-elimination of Hib disease in the United States, but there are lessons to remember.

Because of the high risk of Hib disease within the first 6 months of life, the AAP Redbook Committee recommended that the first dose of Hib vaccine be given as PRP-OMP (PedvaxHIB®, Merck Inc.) PedvaxHIB® results in rapid seroconversion to protective antibody concentrations after the first dose. After the first dose of Hib vaccine any brand of Hib vaccine may be administered. To avoid the confusion, and to minimize the number of vaccinations, it may be easiest to use PevaxHIB to complete a series of 3 injections. While most IHS and tribal sites are using PedvaxHib® routinely, there are some sites that use ActHib®. If you are one of these sites, you can contact your state about switching to PedvaxHib®. If you encounter problems, contact Amy Groom, IHS Immunization Coordinator at Amy.Groom@ihs.gov.

What has happened to Hib disease rates in indigenous children? Hib disease has plummeted in Alaska Natives from 309 to 5.6/100,000; however this rate still looks higher than the current U.S. rate of 0.2/100,000.0. A similar rate (6.7/100,000) has been reported in Australian aboriginal children.

BOTTOM LINE: The rate of Hib disease in AI/AN children is now very low and the numbers of cases in AI/AN children are very small. PedvaxHIB® offers the best protection against Hib disease—especially for the first dose.

Recent literature on American Indian/ Alaskan Native Health

Doug Esposito, MD, MPH

Article

A controlled, household-randomized, open-label trial of the effect that treatment of Helicobacter pylori infection has on iron deficiency in children in rural Alaska. J Infect Dis. 2006 Feb 15;193(4):537-46.

Summary

Last month, I reviewed a paper reporting an association between iron deficiency and active H. pylori infection in school-age Yupik children residing in western Alaska (<http://www.ihs.gov/MedicalPrograms/MCH/M/documents/ICHN406.doc>). The following paper reports the outcome of the treatment arm of that study, and seeks to determine if treatment of H. pylori infection is a useful intervention for pediatric iron deficiency in this and other populations.

The authors conducted a controlled, household-randomized, open-label trial of treatment of H. pylori infection in those children previously found to be iron deficient. The control group received a 6 week course of iron sulfate therapy, while the intervention group received an identical course of iron sulfate plus a 2-week course of triple H. pylori therapy. Re-evaluation of iron status and H. pylori infection via urea breath testing occurred at 2, 8, and 14 month intervals. Those children in the treatment group still found to be infected at the 2 month interval received a 2-week course of quadruple H. pylori therapy.

There was no statistically significant improvement in iron deficiency with treatment and successful resolution of H. pylori infection in the population studied. The authors contend that, at this time, "a strategy of testing for and treating H. pylori infection in patients with isolated iron deficiency or mild anemia may not be appropriate in this and other disadvantaged populations worldwide..." The authors point out that their study was designed to determine the effect of treatment or resolution of H. pylori infection on iron deficiency, not necessarily whether H. pylori infection was causal of iron deficiency (please see my review of the subject last month), though such a relationship of causality might actually be present. Additionally, their study did not carry sufficient statistical power to uncover small effects, or differences between subgroups of study participants. Of course, further study is recommended.

Editorial Comment

It is commendable that this negative-effect study was published. As many of you know, studies reporting a positive-effect are published with much greater frequency than those reporting a negative or neutral-effect (known as positive-outcome or publication bias). This unfortunate reality creates an overall prejudice in the published literature, which must be recognized when critically reviewing a subject. It is not that these negative-effects are not uncovered. It is simply that such studies are just not submitted or accepted for publication as frequently as their positive counterparts, resulting in a less robust body of data on a subject than otherwise might be available.

That there was no statistical effect found in the current study calls into question the whole notion that treatment for H. pylori infection will improve iron status in co-affected individuals. There are a number of studies out there reporting such an effect, but most of these studies are either small or methodologically flawed in some significant way. In a recent personal communication with Dr. Baggett, one of the authors of the Alaska study, he suggests: "I think it's worth reading the paper, because I don't think negative results in this study disprove an association--just suggests that treating the Hp in school-age children may not improve the iron deficiency."

For me, this and other published articles on Helicobacter pylori reveal how little we know about this organism and its pathophysiology, diagnosis, and treatment in children. The clinical conundrum it presents is significant, and considerably frustrating. Hopefully, as more and more carefully designed studies are conducted and reported, we will be able to develop rational and effective protocols for identifying and treating H. pylori infection and its sequelae in our pediatric patients, especially in those kids presenting with abdominal pain or unexplained or unsuspected iron deficiency.

Previously Reviewed Article

Endemic iron deficiency associated with Helicobacter pylori infection among school-aged children in Alaska. Pediatrics. 2006 Mar;117(3):e396-404. Epub 2006 Feb 1.

Article

Effect of a National Vaccine Shortage on Vaccine Coverage for American Indian/Alaska Native Children. Am J Public Health. 2006 Apr;96(4):697-701.

Summary

In 2001-2002, the US experienced a shortage in 5 of the 8 vaccinations routinely recommended for children, including DTaP, varicella, MMR, pneumococcal conjugate, and Td vaccines. Studies have shown that regional and private versus public sector variability in access to and coverage of DTaP occurred during this shortage. It has been recommended that such inequities be remedied.

The authors of this article used the robust vaccine reporting system present in IHS to investigate disparities in coverage of AI/AN children with DTaP 4 (the fourth in the recommended 5 dose series) as a result of the national shortage. They found that among children covered in the IHS immunization reports, there was a 14.8% overall decline in receipt of DTaP 4 as compared to a 1.8% decline for the general US population and a 6% decline

(continued on page 14)

From Your Colleagues

Carolyn Aoymana, HQE

Women's Health Assessment Toolkit (WHAT)

The Women's Health Assessment Toolkit (WHAT) is a collaborative project of the Texas Medical Center Women's Health Network and the Region VI Office on Women's Health, U.S. DHHS. The WHAT has been developed to guide local or regional decision-makers or community planners in assessing women's health status and related infrastructure within a specific designated community. The WHAT provides a series of guided exercises that help local community planners:

- Describe demographics about the women of their area Link to county level data
- This is 2000 to 2003 data broken out by various demographics, race and ethnicity and the following.
- Adopt measurable objectives based on 19 Women's Health Indicators;
- Identify existing assets and prioritize needs from 35 community health status assets
  - o Health i.e. Breastfeeding support
  - o Health education and information i.e. adolescent STD
  - o Community i.e. safe recreation policies and availability
  - o Other
- Incorporate findings into a usable planning document (Part 4, Putting It All Together) The guided exercises can be used individually or collectively can be used to plan activities, raise funds, build collaborations, allocate resources, and influence public policy. **www.healthstatus2010.com/owh/**

Chuck North, Albuquerque

The new medical "missionaries"—grooming the next generation of global health workers

In addition to a discussion of the Indian Health system, there is an OB/GYN residency where the residents all rotate to Eritrea and do pelvic reconstruction.

Other examples include: Noelle Benzekri is a first-year medical student with a mission. Even before the 27-year-old New York native spent a year as a clinic assistant and polio vaccinateur in Senegal, she knew that global health was her calling. "It's the reason I decided to go to medical school," the former philosophy major acknowledged at a recent meeting of our journal club on global health at the University of California, Los Angeles (UCLA). Spurred by memories of her African patients, Benzekri intends to return to Africa someday to train local health workers to deliver care to the poorest of the poor…..go to NEJM link below for further text…

Panosian C, Coates TJ. The new medical "missionaries"--grooming the next generation of global health workers. N Engl J Med. 2006 Apr 27;354(17):1771-3.

Ty Reidhead, Whiteriver

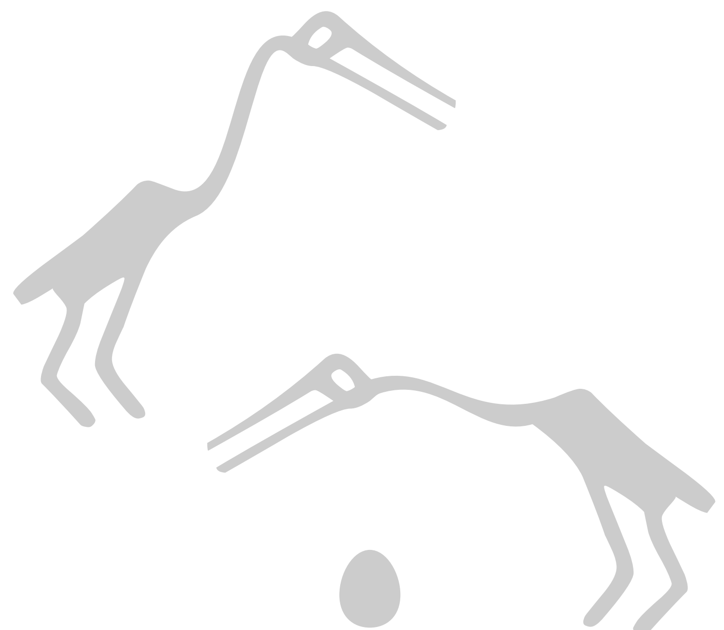
New funding opportunity under the IHS Chronic Disease Initiative

The Indian Health Service (IHS) is pleased to announce a new funding opportunity under the IHS Chronic Disease Initiative. During Year 1 of the initiative, funding will support a small group of selected applicants (from a pool of federal IHS sites) who will work together through a collaborative process to develop an innovative approach to chronic disease management in the Indian health system. It is anticipated that in Initiative Year 2, non-federal sites will have the opportunity to apply for funding to participate in the collaborative.

Pilot sites will receive one year of funding to pay for travel to one in-person training meeting, as well as the supplies and equipment required to participate in Chronic Disease Collaborative web-based activities. Pilot sites will also receive a small amount of funding to ensure dedicated time for a local pilot site coordinator who will provide day-to-day leadership.

Questions can be directed to:

Pat Lundgren: Phone: (928) 338-4911 x3707
pat.lundgren@ihs.gov
Charles Ty Reidhead, MD: Phone: (928) 338-4911
charles.reidhead@ihs.gov



Hot Topics:

Obstetrics

COUNTERPOINT: Not Yet Time to Use the P:C Ratio

The P:C ratio would at first glance seem to be an excellent short cut in the diagnosis and management of pre-eclampsia, but we have several concerns:

1) Because of the many physiologic changes that occur in pregnancy and the unique pathophysiology of pre-eclampsia, comparing the usefulness of the P:C ratio in pre-eclampsia to the management of chronic renal disease is, we feel, inappropriate.
2) The literature in pregnant women is incomplete and inconsistent but seems to indicate that P:C ratio can be used to rule OUT significant proteinuria, but is not reliable in quantifying the level of proteinuria in pregnant women with pre-eclampsia.
3) In regards to the pathophysiology of proteinuria in pre-eclampsia, we cannot assume that protein excretion from the glomerular endotheliosis is as constant as the creatinine excretion. Meaning that the excretion of protein can increase and decrease significantly over short periods of time, independent of the GFR, where the excretion of creatinine will not.
4) Despite all this, we would still endorse the use of the P:C ratio in certain clinical situations for ruling out pre-eclampsia if the cut-off is low enough to keep the sensitivity high. We might consider using the P:C ratio to make a transfer decision, but not to diagnose/treat a patient in house.(Can you imagine trying to transfer a 30 week EGA woman to a wary physician 200 miles away solely because of an elevated P:C ratio?) We suspect there would be enough other clinical information available to make the transfer decision.
5) Medico-legally, we are rolling the dice if ACOG hasn't endorsed the use of P:C ratios in diagnosing and managing pre-eclampsia.
6) In the article, we appreciated the comment about looking at the entire clinical picture. Pre-eclampsia is a sneaky disease and the appropriate treatment is typically based on the "weight of evidence". We often hear ourselves and our colleagues after a lengthy discussion of a patient in whom we are trying to r/o pre-eclampsia say, "Does she look like she has pre-eclampsia?" It is often the most important piece of data when the diagnosis is questionable.

Overall, we are not convinced we can predict the 24-hour urine protein excretion reliably with the P:C ratio in both the 120 kg 40 y/o diabetic woman and the 45 kg 16 y/o woman. Also, the pursuit seems academic. We haven't seen a patient go from questionable pre-eclampsia to a disease state that doesn't allow for transfer while waiting for a 24-hour urine. We know that pre-eclampsia can progress rapidly and all of us have seen people go from mild to severe to seizures over a short period of time, but we are usually not surprised by the rapid progression. It would seem that the major reason for promoting the use of P:C ratio in pregnancy is simply to avoid the hassle (for patient and clinician) of collecting and waiting for the results of the venerable 24-hour urine protein quantification. Unfortunately, for the reasons outlined above, we do not believe that this is clinically appropriate or supported by the current data.

David Gahn, Hastings Indian Medical Center

Eric Manske, Gallup Indian Medical Center

OB/GYN CCC Editorial

I want to thank David Gahn and Eric Mankse for this thoughtful counterpoint to the April CCCC Abstract of the Month, 'Protein to Creatinine Ratio in Pre-eclampsia: Is the data preceding the U.S. benchmarks? ' with Comments by Jonathan Steinhart and Jean Howe.

I would like to clarify two other points that were raised in the wake of that Abstract of the Month.

First, the original systematic review by Price et al, suggested that the P:C had it greatest value in the P:C's ability to 'rule out' significant proteinuria, i.e. one were emphasizing the negative predictive value. "Most importantly, we have shown that the protein: creatinine ratio for a random urine sample (particularly with adjustment of the test threshold to a lower value) might be used to rule out the presence of significant proteinuria as defined by a quantitative measure of the 24-h protein excretion. Use of the ratio negates the uncertainty associated with the use of dilute or concentrated urine...When results above the cutoff value for the protein:creatinine ratio are obtained, a full 24-h urine collection and quantification are indicated."

From a logistics viewpoint, there is enough evidence to use the P:C to rule out the disease. That way one can let the patient go home without the delay of being admitted and doing the collection, which as we agree gives very variable results. If the P:C value is over 0.2, then they should probably have further evaluation. Also, as Sibai has demonstrated in several papers, while the presence of proteinuria is what enables us to make the diagnosis, the amount of proteinuria is not associated with either maternal or infant outcome.

Second, here is another important comment and question from one of our readers:

"You state in passing that "as we currently recommend the use of daily aspirin therapy in patients with previous severe pre-eclampsia"; I am unaware that this is a currently endorsed strategy for prevention of preeclampsia in this country, given the large multicenter trials disproving this intervention (e.g., NEJM 1998; 338:701-05. Caritis et al "low-dose aspirin to prevent preeclampsia in women at high risk"). Though the Cochrane review of 42 trials does show a small benefit.

"What source(s) do you have?"

(Answer) Yes, we have been recommending low dose ASA on our Indian Health national guidelines website for a small

➔ group of high risk patients for a while now.

- Chronic HTN
- Past severe pre-eclampsia
- Renal disease
- Pre-existing Diabetes

Yes, it is based on the Cochrane Review below, though the content was actually brought to our attention by the IHS Nephrology Chief Clinical Consultant prior to that.

Knight M, Duley L, Henderson-Smart DJ, King JF. Antiplatelet agents for preventing and treating pre-eclampsia. The Cochrane Database of Systematic Reviews 2000, Issue 2. Art. No.: CD000492. DOI: 10.1002/14651858.CD000492.

IHS Guidelines page

www.ihs.gov/NonMedicalPrograms/nc4/nc4-clinguid.cfm

Prenatal Weight Gain Recommendations —Obesity in Pregnancy

One third of adult women in the United States are obese. During pregnancy, obese women are at increased risk for several adverse perinatal outcomes, including anesthetic, perioperative, and other maternal and fetal complications. Obstetricians should provide preconception counselling and education about the possible complications and should encourage obese patients to undertake a weight reduction program before attempting pregnancy. Obstetricians also should address prenatal and peripartum care considerations that may be especially relevant for obese patients, including those who have undergone bariatric surgery.

Women who are obese (i.e., those with a body mass index [BMI] of 30 kg per m2 or greater) are at increased risk of complications of pregnancy such as gestational hypertension and diabetes, preeclampsia, fetal macrosomia, spontaneous abortion, cesarean delivery, neural tube defects in the fetus, and stillbirth. Estimation of fetal weight and interpretation of external fetal heart rate and patterns of uterine contraction also may be problematic in women who are obese. Infants who are large for their gestational age are more common in mothers who are obese, and these infants subsequently are at increased risk of childhood obesity. In addition, operative and postoperative complications such as excessive blood loss, longer operative time, wound infection, endometritis, and anesthetic challenges are more common in obese patients.

ACOG strongly encourages preconception assessment and counseling of women who are obese, with provision of education about the risks and potential complications for mother and fetus. Nutrition advice should be provided, and patients should be encouraged to make changes in diet and exercise before pregnancy is attempted. Weight loss also should be encouraged before initiation of infertility treatment because of the increased risk of spontaneous abortion in obese women who undergo this therapy. Counseling and exercise programs should continue after delivery.

Women who have had bariatric surgery should be counseled to avoid pregnancy during the postsurgery phase of rapid weight loss. Pregnant women who have had bariatric surgery should have levels of vitamin B12, folate, iron, and calcium assessed to determine whether supplementation is necessary.

Prenatal weight gain recommendations should correspond to the Institute of Medicine guidelines:

BMI below 25 kg per m2	25 to 35 lb (11.4 to 15.9 kg)
BMI of 25 to 29 kg per m2	15 to 25 lb (6.8 to 11.4 kg)
BMI of 30 or greater kg per m2	15 lb (6.8 kg)

In pregnant women who are obese, screening for gestational diabetes should be considered at presentation or in the first trimester, with screenings repeated throughout pregnancy if the results are negative.

Because of the increased likelihood of cesarean delivery and complications of surgery, ACOG recommends that pregnant women who are obese have an anesthesiology consultation before delivery. Because of the increased risk of wound breakdowns and infections in obese patients, antibiotic prophylaxis should be given if cesarean delivery is required. The use of graduated compression stockings, hydration, and early mobilization may be helpful during and after cesarean delivery.

ACOG Committee Opinion number 315, September 2005. Obesity in pregnancy. Obstet Gynecol. 2005 Sep;106(3):671-5.

Gynecology

FDA: Vaccine to Prevent Cervical Cancer Is Safe, Effective

The U.S. Food and Drug Administration Advisory Panel endorsed Merck's Gardasil vaccine against the four strains of human papillomavirus (HPV) responsible for 70 percent of cervical cancer cases. Questions remain as to whether the vaccine's effectiveness could be "offset" by the fact that it does not protect against all cervical cancer-causing HPV strains and congenital anomalies found in some infants born to women who received the vaccine near the time of conception. If approved as expected, the vaccine will be the first to protect against cervical cancer.

The American Cancer Society predicts that about 9,710 new cases of invasive cervical cancer will occur in the United States in 2006 and calculate that about 3,700 women will die from this disease this year. Globally, HPV causes about 470,000 cases of cervical cancer per year, according to the World Health Organization. Many adolescents, adults and health care providers have a limited understanding of HPV infections, particularly those that are sexually transmitted. Individuals must understand these issues to make informed decisions about the new vaccines. The media will play an exceptionally important role in the public's understanding of the issues surrounding HPV and the vaccines.

National Network for Immunization Information

www.immunizationinfo.org/

CDC Facts HPV accine

www.cdc.gov/std/hpv/STDFact-HPV-vaccine.htm

Child Health

Relationship between team sport participation and adolescent smoking

The present study provides the first evidence of interacting effects of environmental influences with specific genetic variants on adolescent smoking progression. Experimentation with cigarette smoking usually begins in adolescence. Some, although not all, adolescents who experiment with cigarettes progress to a regular smoking habit. Environmental or behavioral factors, such as physical activity, seem to account for some of the variability in adolescent smoking progression.

- Physical activity had a significant negative effect on smoking, but only for adolescents with team sport participation. The between-group difference in the effect of physical activity on smoking was significant.
- For adolescents participating in at least one team sport, having one and two risk genotypes had a positive effect on physical activity.
- For adolescents with no team sport participation, neither risk genotype had a significant effect on physical activity.
- The difference in the effect of smoking risk genotype on physical activity between the groups was significant for one and two risk genotypes.
- For adolescents involved in at least one team sport, neither smoking risk genotype had a significant direct effect on smoking; the effect was indirect through physical activity. The indirect effect of one and two smoking risk genotypes on smoking progression through physical activity was significant.
- There was not a significant indirect effect of one and two smoking risk genotypes on smoking progression through physical activity for adolescents without team sport participation, although a direct effect approached significance, indicating an increased risk of smoking progression by the end of 12th grade for adolescents with one and two risk genotypes.

….because adolescent smoking often results in long-term smoking in adulthood, the medical and economic impact of preventing and reducing youth smoking could be significant.

Audrain-McGovern J, Rodriguez D, Wileyto EP, et al. 2006. Effect of team sport participation on genetic predisposition to adolescent smoking progression. Archives of General Psychiatry 63(4):433-441.

Chronic disease and Illness

Caring for Patients After Bariatric Surgery

Bariatric surgery leads to sustainable long-term weight loss and may be curative for such obesity-related comorbidities as diabetes and obstructive sleep apnea in severely obese patients. The Roux-en-Y gastric bypass has become the most common procedure for patients undergoing bariatric surgery. The procedure carries a mortality risk of up to 1 percent and a serious complication risk of up to 10 percent. Indications include body mass index of 40 kg per m2 or greater, or 35 kg per m2 or greater with serious obesity-related comorbidities (e.g., diabetes, obstructive sleep apnea, coronary artery disease, debilitating arthritis). Pulmonary emboli, anastomotic leaks, and respiratory failure account for 80 percent of all deaths 30 days after bariatric surgery; therefore, appropriate prophylaxis for venous thromboembolism (including, in most cases, low-molecular-weight heparin) and awareness of the symptoms of common complications are important. Some of the common short-term complications of bariatric surgery are wound infection, stomal stenosis, marginal ulceration, and constipation. Symptomatic cholelithiasis, dumping syndrome, persistent vomiting, and nutritional deficiencies may present as long-term complications.

Am Fam Physician 2006;73:1403-8

Breastfeeding

Suzan Murphy, PIMC

Database provides information about drugs in breastfeeding mothers

The Drugs and Lactation Database (LactMed) is a peer-reviewed and fully referenced database of drugs to which breastfeeding mothers may be exposed. The database was produced by the National Library of Medicine as part of the Toxicology Data Network. Among the data included are maternal and infant levels of drugs, possible effects on breastfed infants and on lactation, and alternate drugs to consider. The database is searchable by drug name.

http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?LACT

Features

ACOG

ACOG Recommends First Ob-Gyn Visit in Early Teens

The American College of Obstetricians and Gynecologists (ACOG) reaffirms its recommendation that teenage girls first visit an ob-gyn between the ages of 13 and 15 in a new committee opinion published in the May 2006 issue of Obstetrics & Gynecology. This initial reproductive health visit will help teens develop a relationship with their ob-gyn before they need to seek care for a specific health issue. The committee opinion details ACOG recommendations for the scope of the visit, discussion topics, and ways to address confidentiality concerns.

The early teen years are an ideal time for an initial ob-gyn office visit that focuses on screening and preventive health care. "During these years, young teens face new issues regarding sexual and reproductive health and development on a daily basis. It's important that they develop a relationship with their ob-gyn," says Marc Laufer, MD, chair of ACOG's Committee on Adolescent Health Care. "Interaction with an ob-gyn they trust allows teens to get answers to questions that they may be too embarrassed or afraid to raise with parents and friends. Ob-gyns also can encourage teens to adopt healthy lifestyle habits that they can carry into adulthood."

Physicians can discuss normal development, menstruation, sexuality, healthy eating habits, safety and injury prevention, and date rape prevention with teens. It also gives ob-gyns an opportunity to address problems that may require early intervention such as eating disorders and weight issues, blood pressure problems, and mental health issues such as anxiety, depression, and physical, sexual, and emotional abuse.

"Teens who are nervous about receiving a pelvic exam can rest easy. A pelvic exam is rarely necessary during the initial visit, unless indicated by medical history," Dr. Laufer adds. Because ACOG recommends that young women have their first Pap test approximately three years after vaginal intercourse but before age 21, teens may visit the ob-gyn several times before a speculum or pelvic exam is needed. However, ob-gyns may recommend a pelvic exam if the teen has had an abnormal puberty (pubertal aberrancy), abnormal bleeding, or abdominal or pelvic pain.

"The first reproductive health visit is an excellent time to discuss pregnancy prevention and sexually transmitted infections," says Lesley Breech, MD, vice chair of the Committee on Adolescent Health Care. Today, more than 85% of adolescents become sexually active during the teen years - nearly one-third of ninth graders and more than 60% of 12th graders report having had sexual intercourse, and the US has the highest teen pregnancy rate of any industrialized nation. "Physicians can use the visit as an opportunity to provide teens with early and accurate information about sex. We can talk about how to use condoms correctly and the various types of contraception that are available, such as emergency contraception, before they start having sex," Dr. Breech adds. If a teen is already sexually active at the time of her first visit, she can be screened for certain sexually transmitted infections through a urine sample.

Parents are encouraged to get involved. The first visit provides an opportunity for parents or guardians to meet the physician, alleviate fears, and develop trust. Parents also can encourage a positive relationship between their daughter and her ob-gyn. Ob-gyns can greet parents and teens together to give a thorough explanation of the visit and confidentiality issues. The exam and discussion should then continue between physician and teen alone to ensure privacy.

Hepatitis B and Hepatitis C Virus Infections in Obstetrics–Gynecology

ACOG Committee Opinion No. 332

ABSTRACT: Hepatitis B and hepatitis C may be transmitted from patients to health care workers and from health care workers to patients. To reduce the risk, all obstetrician–gynecologists who provide clinical care should receive hepatitis B virus vaccine. Obstetrician–gynecologists who are hepatitis B surface antigen positive and e antigen positive should not perform exposure prone procedures until they have sought counsel from an expert review panel. Because the risk of hepatitis C virus transmission is lower than that of hepatitis B virus transmission, routine testing of health care workers is not recommended, and hepatitis C virus-positive health care workers are not required to restrict professional activities.

Hepatitis B and Hepatitis C Virus Infections in Obstetrician–Gynecologists. ACOG Committee Opinion No. 332. American College of Obstetricians and Gynecologists. Obstet Gynecol 2005;106:1141–2.

Frequently Asked Questions

Q. Are there any cultural barriers/among Native Americans to becoming cord blood donors?

A. Yes, there are issues of the cost for long term cord blood storage, as well as cultural issues. Below are five issues about various aspects of cord blood and tissue donation. The MCH web page also has a Frequently Asked Question with a sample cord blood donation disclaimer and many other resources.

1.) Q. Why should minorities be concerned about organ donation?

A. Some diseases of the kidney, heart, lung, pancreas, and liver are found more frequently in racial and ethnic minority populations than in the general population. For example, African Americans, Asian and Pacific Islanders, and Hispanics are three times more likely to suffer from end-stage renal disease than Caucasians. Native Americans are four times more likely than Caucasians to suffer from diabetes. Some of these diseases are best treated through transplantation; others can only be treated through transplantation.
Successful transplantation often is enhanced by the matching of organs between members of the same ethnic and racial group. For example, any patient is less likely to reject a kidney if it is donated by an individual who is genetically similar. Generally, people are genetically more similar to people of their own ethnicity or race than to people of other races. Therefore, a shortage of organs donated by minorities can contribute to death and longer waiting periods for transplants for minorities.
http://www.unos.org/qa.asp

2.) Q. Why is there a need for women from all racial and ethnic groups to donate their baby's cord blood?

A. Because the tissue traits that are used to match a cord blood unit with a patient are inherited, a patient's most likely match will be cord blood donated by someone of the same heritage. American Indian and Alaska Native, Asian, Black and African American, Hispanic and Latino, Native Hawaiian and Other Pacific Islander, and multiple-race patients face a greater challenge in finding a match than White patients.
NMDP cord blood banks are working in local communities to increase the racial and ethnic diversity of NMDP cord blood listings. From 2001 to 2003, the likelihood of finding a matched cord blood unit has grown at least twofold for patients from all racial and ethnic groups. Still, some patients are unable to find a match because of the rarity of their tissue traits. Some tissue traits are more likely to be found among people of a particular racial or ethnic heritage. That is why a pressing need remains for more cord blood donations from American Indian and Alaska Native, Asian, Black and African American, Hispanic and Latino, Native Hawaiian and Other Pacific Islander, and multiple-race donors. http://www.marrow.org/DONOR/cord_blood_faqs.html#minority

National Marrow Donor Program
http://www.marrow.org/DONOR/cord_blood_faqs.html

3.) There may be no charge to donate, but be sure to ask about storage charges
Cryobanks International is a facility accepting umbilical cord blood donations throughout the United States. Umbilical cord blood is rich in stem cells used in place of bone marrow for transplants. Cryobanks is now working with Dave Jackson, a Native American Advocate and high-risk OB physician, to sponsor an umbilical cord blood donation program. Umbilical Cord Blood Donation is a painless, non-invasive process that utilizes cord blood that would otherwise be discarded as medical waste. Currently, Native Americans in life and death searches have little chance to find a stem cell match. Donations are accepted from anywhere in the Continental United States.
Native Village: Youth and Education News December 10, 2003 Issue 124, Volume 3
Learn more about Cryobanks: http://www.cryo-intl.com/

4.) There is sacred symbolic value associated with the placenta, umbilical cord, and umbilical cord blood
Excerpt:
...Yet, in many indigenous cultures, including Native American, the placenta, umbilical cord, and umbilical cord blood have sacred symbolic value associated...
Abstract: Religious discussion of human organs and tissues has concentrated largely on donation for therapeutic purposes. The retrieval and use of human tissue samples in diagnostic, research, and education contexts have, by contrast, received very little direct theological attention. Initially undertaken at the behest of the National Bioethics Advisory Commission, this essay seeks to explore the theological and religious questions embedded in nontherapeutic use of human tissue. It finds that the "donation paradigm" typically invoked in religious discourse to justify uses of the body for therapeutic reasons is inadequate in the context of nontherapeutic research, while the "resource paradigm" implicit in scientific discourse presumes a reductionist account of the body that runs contrary to important religious values about embodiment. The essay proposes a "contribution paradigm" that provides a religious perspective within which research on human tissue can be both justified and limited. http://muse.jhu.edu/

Campbell, Courtney S. 1956- Religion and the Body in Medical Research, Kennedy Institute of Ethics Journal - Volume 8, Number 3, September 1998, pp. 275-305 The Johns Hopkins University Press.

Family Planning

31% of Sexually Active U.S. Teenage Girls Become Pregnant

Based on the National Survey of Family growth from the National Center for Health Statistics, CDC, and HHS, nearly 31% of girls ages 15 to 19 who have had sexual intercourse at least once become pregnant. In addition, more than 13% of sexually active teenage boys say they have been involved in a pregnancy.

The analysis shows that more than one-third of sexually active girls who have had three or more sexual partners have been pregnant, compared with one in four who have had one or two partners. In addition, the report finds that 27% of girls who used a form of contraception when having sex for the first time said they became pregnant, compared with 43% of girls who did not use contraception during sexual debut.

www.teenpregnancy.org/press/pdf/ScienceSays23.pdf

5.) What is the ethical basis for the draft Indian Health Service's (IHS) Guidelines about the collection and use of research specimens?
Excerpt:
"34. People in some Tribes have traditional beliefs that the placenta, umbilical cord, and umbilical cord blood are sacred and must be handled in a special manner. IHS hospitals give such tissues back to the patient or family upon request."

This paper presents the ethical bases for the DRAFT Indian Health Service's (IHS) Guidelines about the collection and use of research specimens (Appendix A). The Guidelines were designed to be a working document for American Indian and Alaska Native (AI/AN)(3) Tribal communities and people; its ethical rationale was not discussed. The Guidelines are relevant to most U.S. people, researchers, and policy makers; if researchers and ethicists are to them as relevant, however, that ethical rationale must be clarified and convincing…

For the proper perspective please view the entire paper.

This was published in:

Weir R (ed.). Stored tissue samples: Ethical, legal, and public policy implications. U. Iowa Press; Iowa City, IA. 1998: 267-301.

This document is the pre-edited next-to-final version. For the final, printed, version, please see the book.
This paper does not necessarily represent the views of the Indian Health Service

Frequently Asked Question: MCH website

Q. Is cord blood stem cell storage a viable option in Indian Country?
A. Cord blood stem cell storage can offer patients both advantages and disadvantages.
http://www.ihs.gov/MedicalPrograms/MCH/M/documents/CordStem4206.doc

Midwives Corner

Routine use of sweeping of membranes from 38 weeks of pregnancy onwards

Cochrane Database of Systematic Review

Risk of caesarean section was similar between groups (relative risk (RR) 0.90, 95% confidence interval (CI) 0.70 to 1.15). Sweeping of the membranes, performed as a general policy in women at term, was associated with reduced duration of pregnancy and reduced frequency of pregnancy continuing beyond 41 weeks (RR 0.59, 95% CI 0.46 to 0.74) and 42 weeks (RR 0.28, 95% CI 0.15 to 0.50). To avoid one formal induction of labour, sweeping of membranes must be performed in eight women (NNT = 8). There was no evidence of a difference in the risk of maternal or neonatal infection. Discomfort during vaginal examination and other adverse effects (bleeding, irregular contractions) were more frequently reported by women allocated to sweeping. Studies comparing sweeping with prostaglandin administration are of limited sample size and do not provide evidence of benefit.

AUTHORS' CONCLUSIONS: Routine use of sweeping of membranes from 38 weeks of pregnancy onwards does not seem to produce clinically important benefits. When used as a means for induction of labour, the reduction in the use of more formal methods of induction needs to be balanced against women's discomfort and other adverse effects.

Boulvain M, Stan C, Irion O. Membrane sweeping for induction of labour. The Cochrane Database of Systematic Reviews 2005, Issue 1. Art. No.: CD000451.pub2. DOI: 10.1002/14651858.CD000451.pub2

Medical Mystery Tour

What was the common theme in these 2 cases?

Let's recap what we learned last month (Apr, CCC Corner)

PATIENT #1: This 35 year old G 2 P1001 was originally scheduled for elective repeat cesarean delivery at 36 2/7 pending results of fetal lung maturity studies. The patient's prenatal course was significant for a first visit at 8 weeks. The gestational age was confirmed by a 10 week ultrasound. The patient was offered a quad screen and /or amniocentesis and declined both. The patient had gastroesophageal reflux disease and received omeprazole 20 mg per day orally.

The patient's previous delivery was significant for a low transverse cesarean delivery for an abruption placenta at term. The infant did well and she had an unremarkable course. She otherwise had a history of mild endometriosis and laparoscopy for an ovarian cystectomy.

PATIENT #2: This 20 year old G 3 P 0020 at 40 2/7 presented with good early dating for an outpatient cervical ripening regimen. The patient had uncomplicated Class A1 gestational diabetes mellitus. The patient weighed 193 lbs and her fetus was in a cephalic presentation. Her cervical exam was 50% effaced, 1 cm dilation at the external os, firm, and posterior with the presenting part at -3 station.

THE QUESTION WAS: What do these two patients have in common?

First, let me tell you a little more about our patients....

Patient #1 received an amniocentesis that revealed a fluorescence polarization (FP) of 30 mg / g, which is immature. One reference laboratory's FP ranges include

IMMATURE	<= 39 MG/G
MATURE	>= 55 MG/G

Results between 40-54 mg/G cannot be declared "Mature" or "Immature with the same level of confidence and should be considered "Inconclusive".

The reflex follow up test was a phosphatidyglyscerol (PG)

%PGL	Trace
%Ppt.Lec.	65
%PI	27.0
LS ratio	2.4

Comment: Interpretation: Lungs are - Mature with caution if not Diabetic or 36 weeks

Soon after the PG level result returned (NB: the patient had been 36 2/7 when the amniocentesis was performed) the patient underwent a cesarean delivery for what was termed 'extreme maternal anxiety'.

The patient delivered a 7 lb. 5 oz. with Apgars of 8 and 9. The infant developed respiratory distress and required additional respiratory support and was transferred to the neonatal intensive care unit. The mother did well and was discharged on the third post-operative day. The infant remained hospitalized in the special care nursery and was discharged on the 5th hospital day.

Patient #2 was functional a primipara who received a 3 day cervical ripening process followed by a prolonged 2 day induction of labor. This process culminated in a cesarean delivery for prolonged 1st stage of labor as the patient did not progress beyond 8-9 cm despite adequate contractions with oxytocin augmentation. The patient delivered a 6 lb. 15 oz. infant with Apgars of 7/8. The mother and infant initially had an unremarkable post-operative course and were both discharged afebrile on post-operative day 2.

The mother had to be re-admitted for wound care on post-operative day #6 for wound cellulitus. The patient was started on ampicillin, clindamycin, and gentamicin intravenously and spontaneously began draining purulent material from her wound. The patient remained hospitalized until post-operative day #10. At the time of this review the patient was still being followed in outpatient clinic for continued wound care 5 weeks after her surgery.

Let me summarize the clinical scenarios:

The first patient received an elective cesarean delivery for 'extreme maternal anxiety' with an immature lung profile at 36 weeks. (Please recall it was reported a 'Mature with caution if not Diabetic or 36 weeks and the patient had been 36 2/7 at the time of amniocentesis) Her infant developed respiratory distress and required neonatal intensive care. The infant remained hospitalized after the mother was discharged.

The second patient underwent a cervical ripening and subsequent prolonged induction of labor with an unripe cervix. The patient ultimately received a cesarean delivery with a less than 7 lb. infant for a prolonged 1st stage of labor. The patient developed a wound infection and required re-admission to the hospital. The patient required prolonged outpatient wound care that was not complete at the time of this review.

SO, BACK TO THE QUESTION: **What do these cases have in common?**

The cases have two things in common:

First, the patients developed common complications of common procedures:

- prolonged neonatal intensive care after premature delivery (though in this case, iatrogenic prematurity)
- prolonged wound care after a cesarean delivery for a failed induction (though in this case, for a non-acute indication with an unripe cervix)

Second, these both happened the during the same holiday week.

The first patient received her amniocentesis on Christmas day and second patient had the decision to begin cervical ripening made on the day before Christmas Eve.

A couple thoughts come to mind. As some move toward cesarean delivery on demand and increasingly patient directed care, we may want to reflect that at one point that our predecessors ➔

Menopause Management

Effects of Conjugated Equine Estrogen on Quality of Life

The authors conclude that oral conjugated equine estrogen does not have a clinically significant effect on health-related quality of life in women who have had a hysterectomy. They add that in the WHI study, the risks and benefits of conjugated equine estrogen use were relatively balanced at six years. They note that vasomotor symptoms will improve in some women, but this is offset by the adverse effects of hormone therapy.

Brunner RL, et al. Effects of conjugated equine estrogen on health-related quality of life in postmenopausal women with hysterectomy. Arch Intern Med September 26, 2005;165:1976-86

➔ followed this dictum, in Greek "First, do no harm" becomes "Primum non nocere" in Latin.*

One could argue that in an effort to comply with these patient's wishes to be at home with their family for the holidays, that our health system may have failed to uphold the spirit of one of its most basic principles.

*A translation of the original perhaps, but some sources attribute "Primum non nocere" to the Roman physician, Galen.

www.geocities.com/everwild7/noharm.html

OB/GYN CCC Editorial

Is it 'poor datism' or post datism?

Considering the 2 cases above, let's muse about elective induction of labor. In 2002, the last year for which full natality statistics were available, the labor induction rate was 20.6%. This reflects a 64% increase since 1989. Demographics reveal that induction of labor is more common in insured patients, but is rising in all groups. As more than 60% of women are in the formal work force, some degree of scheduling is desirable on economic grounds alone. The challenge is to balance patient autonomy with resource utilization and health care concerns as illustrated above.

Other positive aspects of labor induction is that is allows us to smooth the L/D work flow and as increasing number of indications for induction of labor are developing rapidly, e.g., post term vs post datism. The key calibrate our patients expectations and not to allow ourselves to misguide patients about their chance of timely delivery with an unfavorable cervix. Or put another way, to what extent do we need to allow our patient's mother in law's frequent flyer ticket affect our clinical practice. We should also be aware that in many cases we are inducing patients for what amounts to 'poor datism', rather than true post datism.

Throughout this increase in induction of labor, ACOG has not changed its criteria for elective delivery, e.g., 39 weeks by good dating parameters. (see multiple Resources online)

Confirmation of Term Gestation, ACOG Practice Bulletin, No. 10

- Fetal heart tones have been documented for 20 weeks by nonelectronic fetoscope or for 30 weeks by Doppler.
- It has been 36 weeks since a positive serum or urine human chorionic gonadotropin pregnancy test was performed by a reliable laboratory.
- An ultrasound measurement of the crown. rump length, obtained at 6-12 weeks, supports a gestational age of at least 39 weeks.
- An ultrasound obtained at 13-20 weeks confirms the gestational age of at least 39 weeks determined by clinical history and physical examination.

Induction of Labor ACOG Practice Bulletin NUMBER 10, NOVEMBER 1999. American College of Obstetricians and Gynecologists, Washington, D.C.

Oklahoma Perspective

Greggory Woitte—Hastings Indian Medical Center

Female Sexual Dysfunction

Female sexual dysfunction is a common problem affecting an estimated 50-80% of postmenopausal women as well as a significant number or premenopausal women. Sexual dysfunction can take on several variations from an absence of sexual fantasies and desire for sexual activity (hypoactive sexual desire disorder) to an absence of orgasm after normal sexual excitement phase (female orgasmic disorder). As with many topics in our specialty, this taboo subject is often only discussed when asked about. Getting a good history and providing the patient with information can often alleviate some of the problems. Medications such as testosterone and hormone replacement therapy can be used but, there is limited evidence supporting widespread use of these medications. Here are a few articles that will make you more comfortable approaching this topic with your patients.

Basson R, Clinical practice. Sexual desire and arousal disorders in women. N Engl J Med. 2006 Apr 6;354(14):1497-506.

Modelska K, Female sexual dysfunction in postmenopausal women: systematic review of placebo-controlled trials. Am J Obstet Gynecol. 2003 Jan;188(1):286-93.

Navajo Corner

Kathleen Harner, Tuba City

Methamphetamine abuse among women on Navajo
PART 2 of 4

Recognizing methamphetamine (MA) abuse is not always simple. A few weeks ago, I saw a lovely multigravid woman in the ER, at TCRHCC, bleeding with an incomplete abortion. Her husband was with her and she was clearly grieving about the pregnancy loss. He was appropriately concerned about her and attentive to her grief. When he left the ER to check on their children at home, she confided to me that he had been "doing meth" and it was affecting their marriage. She asked me if I would talk to him and urge him, for the sake of their family, to stop. Although I routinely ask patients about illicit drug use, I would never have guessed that this family had a problem. The first challenge for the practitioner is identifying the patients with a problem. Once this is done, how best to help the Gravida and her family?

One of the best opportunities to approach and intervene with the substance abusing woman is when she is pregnant. The pregnancy or the child's birth may give her a powerful motive to seek treatment for her addiction. Early intervention efforts during the prenatal period increase the likelihood that she will successfully recover from drug abuse. It is equally important to provide the pregnant, substance abusing woman with optimal, comprehensive obstetrical care to avoid the complications of pregnancy that can occur in the abusing gravida. A continuum of follow up services is a critical element for an improved quality of life for the substance abusing woman and her family. She often lives in a stressful environment that may include physical and sexual abuse, single parenthood, and limited financial and social support. Interventions during the postnatal period are needed to help her successfully parent her child, abstain from the use of drugs, and address complex social needs.

It is a good assumption, that if a pregnant MA abuser seeks prenatal care, she is interested in ending her drug use. Health care providers have a unique opportunity during pregnancy to identify drug abusers and help them stop abusing. For a treatment program to effectively meet the needs of MA abusers, it is essential to understand the perspective of the "customer" as she approaches, enters, and participates in treatment. There are a number of entry points in the system for women who might not present directly for treatment, including:

- Pediatricians (mothers will take children to the doctor even when they will not go for their own problems)
- Child protective agencies
- Social service agencies
- Primary care providers
- Criminal justice system

Two types of barriers must often be addressed concerning outreach to women who use MA. First, internal barriers to seeking treatment for substance use disorders that include guilt, depression, fear of children being taken away, and fear of partners who are using or dealing drugs must be identified and mitigated. Second, external barriers to be examined include lack of accessibility to treatment programs, need for childcare, or lack of community-based programs that prevent women from seeking treatment. Often, reducing just one barrier is enough to bring a woman into treatment. For example, treatment programs that provide childcare may have higher participation levels than those that do not. Treatment for women should involve a holistic approach.

According to the National Institute on Drug Abuse the most effective treatments for MA addiction are cognitive behavioral interventions. These approaches are designed to help modify the patient's thinking, expectations and behaviors and to increase skill in coping with life stressors. Methamphetimine support groups are also effective adjuncts to behavioral interventions. There are no pharmacological treatments for MA abuse although antidepressant medications can be helpful in combating the depressive symptoms seen in the first few months of abstinence from the drug.

Incentives, contingent on drug abstinence are a powerful intervention tool for facilitating abstinence in cocaine and methadone maintained cocaine abusers. There is evidence that MA dependent individuals respond similarly. The aim is to decrease behaviors maintained by drug reinforcers and increase behaviors maintained by nondrug enforcers by presenting rewards.

Although some traditional drug abuse treatment elements are appropriate for MA abusers, many treatment staff feels ill prepared to address the challenges presented by MA abusers. Poor treatment engagement rates, high drop out rates, severe paranoia, high relapse rates, ongoing episodes of psychosis severe craving and anhydonia are clinical challenges that are frequently more problematic than seen with standard treatment populations. In small communities, it is often only law enforcement which has the proper skills to deal with the needs of MA abusers. Several of the clinical problems encountered by the staff working with MA abusers occur because the staff has primarily been trained in alcoholism treatment and the severe psychiatric symptomatology of MA abusers is simply beyond their scope of practice. Providing extra training to this staff is part of the solution. Involving mental health experts also helps to meet these clinical challenges.

Pregnant women pose additional challenges; in addition to intensive outpatient treatment attention must be given to providing prenatal care. It is important that the clinical staff working with pregnant women is capable of dealing with their relapses. Often there is a lack of empathy to pregnant women who are using drugs. Additionally, women with small children require ➔

STD Corner

Lori de Ravello, National IHS STD Program

Prediction of Pelvic Inflammatory Disease Among Single, Sexually Active Women

Results: Women enrolled using the risk score were young, single, sexually active, and often had prior sexually transmitted infections. Incident PID was common (8.6%). From 24 potential predictors, significant factors included age at first sex, gonococcal/chlamydial cervicitis, history of PID, family income, smoking, medroxyprogesterone acetate use, and sex with menses. The model correctly predicted 74% of incident PID; in validation models, correct prediction was only 69%.

Conclusions: Our data validate a modified chlamydial risk factor scoring system for prediction of PID. Additional multivariable modeling contributed little to prediction. Women identified by a threshold value on the chlamydial risk score should undergo intensive education and screening.

Ness RB et al. Prediction of Pelvic Inflammatory Disease Among Young, Single, Sexually Active Women. Sexually Transmitted Diseases. 33(3):137-142, March 2006.

an increased level of support while in treatment. The combined burdens of work, home care, childcare and family responsibilities in addition to attending treatment frequently can lead to a fatigue so profound the MA abuse may reoccur in an effort to combat exhaustion.

Stimulant users, which include MA abusers, respond well to contingency procedures and this includes drug court strategies. Drug courts are based upon the rapid and certain application of contingent consequences based upon the behavior of the drug user. Drug court participants who successfully exhibit desired behaviors can earn their way to progressively less demanding treatment regimens. Those unable to maintain a contract of desired behaviors move to more intensive levels of care or incarceration. The National Institute of Drug Abuse has demonstrated that once women enter a treatment program, the motivation to stay drug free is their children.

Sites for messaging to children and adolescents:

- Graphic T.V. advertisements created in Montana: **www.montanameth.org/ads_television.aspx**
- "Meth, not even once" **www.notevenonce.com**

(Ed Comment: Effective, but very graphic content. Please review prior to dispersal)

NEXT MONTH:
The Phoenix Indian Medical Center's approach to the substance abusing gravida.

(Child Health Notes, continued from page 14)

for children receiving their immunizations from public clinics. Interestingly, they identified a surprisingly wide variability in declining immunization rates when IHS was stratified by region (4.5% in Alaska to 26.5 % in the Southwest).

The authors suggest that the inequities in vaccine distribution identified specifically for IHS parallel the findings from other studies of the US population in general. There appeared to be a maldistribution of vaccine to rural areas, public clinics, and the southern United States during the period time of vaccine shortage. They suggest further evaluation of the vaccine distribution system and that more equitable distribution procedures and practices need to be implemented on a national, state, tribal, and local level.

Editorial Comment

I believe the results of this study speak for themselves. In the US, there exists a well characterized inequity in distribution of therapeutic and preventive medical resources. This situation is in desperate need of attention. The only question that remains is whether we as a society and a nation have the will to do what desperately needs to be done?

Article

Improving Access to Health Care Among New Zealand's Maori Population. Am J Public Health. 2006 Apr;96(4):612-7.

Editorial Comment

The similarities between the plight of the Maori and that of North American indigenous populations are striking. Statistical trends and the ever widening disparities in health status appear to have parallel roots. "In particular, it has been argued that the continuing disparities in health between Maoris and non-Maoris represent evidence that Maori health rights are not being protected as guaranteed under the treaty and that social, cultural, economic, and political factors cannot be overlooked in terms of their contribution to the health status of this group." Sound familiar?

This is an article worth reading for those who wish to examine cross-national parallels of health disparities and socio-economic struggles of native populations worldwide (or aboriginals, as the British Commonwealth countries are fond of saying).

Perinatology Picks

George Gilson, MFM, ANMC

Factors Associated With Rise in Primary Cesarean Births in the United States, 1991-2002

OBJECTIVES: We examined factors contributing to shifts in primary cesarean rates in the United States between 1991 and 2002.

METHODS: US national birth certificate data were used to assess changes in primary cesarean rates stratified according to maternal age, parity, and race/ethnicity. Trends in the occurrence of medical risk factors or complications of labor or delivery listed on birth certificates and the corresponding primary cesarean rates for such conditions were examined.

RESULTS: More than half (53%) of the recent increase in overall cesarean rates resulted from rising primary cesarean rates. There was a steady decrease in the primary cesarean rate from 1991 to 1996, followed by a rapid increase from 1996 to 2002. In 2002, more than one fourth of first-time mothers delivered their infants via cesarean. Changing primary cesarean rates were not related to general shifts in mothers' medical risk profiles. However, rates for virtually every condition listed on birth certificates shifted in the same pattern as with the overall rates.

CONCLUSIONS: Our results showed that shifts in primary cesarean rates during the study period were not related to shifts in maternal risk profiles.

Declercq E, Menacker F, MacDorman M. Factors Associated With the Rise in Primary Cesarean Births in the United States, 1991-2002 Am. J Public Health. 2006; 96(5):867-872)

Family Planning

Postpartum contraception: New Mexico Pregnancy Risk Assessment Monitoring System

OBJECTIVE: To examine factors associated with postpartum contraception, including the relationship between ethnicity and postpartum contraceptive use.

METHODS: We used data from the New Mexico Pregnancy Risk Assessment Monitoring System, which monitors selected maternal events occurring before, during and after pregnancy.

RESULTS: Our findings in 4096 women revealed that women who are aged >or=35 years, unmarried and lacking a postpartum visit have increased risk of no postpartum contraception. The odds of postpartum contraception were over three times greater in women with a postpartum visit [adjusted odds ratio (OR)=3.06, 95% confidence interval (CI): 2.17-4.31) and over 50% greater in married women(adjusted OR=1.57, 95% CI: 1.16-2.11). Hispanic women were more likely than were Native Americans to use postpartum contraception (OR=1.25, 95% CI: 0.95-1.64).

CONCLUSION: Focused contraception counseling, especially in the postpartum setting, is important to help ensure the well-being of women and children.

Depineres T, Blumenthal PD, Diener-West M. Postpartum contraception: the New Mexico Pregnancy Risk Assessment Monitoring System. Contraception. 72(6):422-5, 2005 Dec

The Apgar Score

ACOG Committee Opinion No. 333

ABSTRACT: The Apgar score provides a convenient shorthand for reporting the status of the newborn infant and the response to resuscitation. The Apgar score has been used inappropriately to predict specific neurologic outcome in the term infant. There are no consistent data on the significance of the Apgar score in preterm infants. The Apgar score has limitations, and it is inappropriate to use it alone to establish the diagnosis of asphyxia. An Apgar score assigned during resuscitation is not equivalent to a score assigned to a spontaneously breathing infant. An expanded Apgar score reporting form will account for concurrent resuscitative interventions and provide information to improve systems of perinatal and neonatal care.

The Apgar Score. ACOG Committee Opinion No. 333. American College of Obstetricians and Gynecologists. Obstet Gynecol 2005;106:1141–2.

SAVE THE DATES

PUBLIC'S HEALTH & THE LAW IN THE 21ST CENTURY

* June 12–14, 2006
* Atlanta, Georgia
  www2a.cdc.gov/phlp/conference2006.asp

IHS/ACOG Obstetric, Neonatal, and Gynecologic Care Course

* September 17–21, 2006
* Denver, CO
* Contact YMalloy@acog.org
  or call Yvonne Malloy at 202-863-2580
* Neonatal Resuscitation Program available
* Brochure
  www.ihs.gov/MedicalPrograms/MCH/F/documents/ACOG_06brochR1_1.pdf

2007 Indian Health MCH and Women's Health National Conference

* August 15–17, 2007
* Albuquerque, NM
* For anyone involved in care of women and children
* Internationally recognized speakers
* Save the dates. Details to follow

Neil Murphy, MD
PCC–WH
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Anchorage, AK 99508

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Some of the Articles Inside — CCC Corner — May 2006

Abstract of the Month

- Maternal periodontal disease in early pregnancy: Small-for-gestational-age infant

IHS Child Health Notes

- Humidified air doesn't improve croup scores—end of story
- Fluoroquinolone use in children
- Endemic iron deficiency associated with Helicobacter pylori

From Your Colleagues

- Carolyn Aoymana, HQE—Women's Health Assessment Toolkit (WHAT)
- Chuck North, Albuquerque—The new medical "missionaries"—grooming the next generation of global health workers
- Ty Reidhead, Whiteriver—New funding opportunity under theIHS Chronic Disease Initiative

Hot Topics

- Obstetrics—COUNTERPOINT: Not Yet Time to Use the P:C Ratio
- Gynecology—FDA:Vaccine to Prevent Cervical Cancer Is Safe, Effective
- Child Health—Relationship between team sport participation and adolescent smoking

Features

ACOG—Recommends First Ob-Gyn Visit in Early Teens
Family Planning—31% of Sexually Active U.S. Teenage Girls Become Pregnant
Midwives Corner—Routine use of sweeping of membranes from 38 weeks of pregnancy onwards
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Navajo Corner—Methamphetamine abuse among women on Navajo (PART 2 of 4)
Perinatology Picks—Factors Associated With Rise in Primary Cesarean Births in the United States