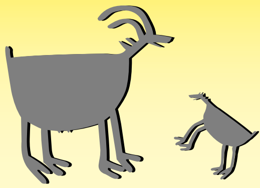

CCC Corner

National Council of Chief Clinical Consultants

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

Vol 4, No 08
Aug 2006

Rate of uterine rupture hasn't changed for 20 years

—Why *have* our practices changed?

The rate of symptomatic uterine rupture has been quoted at 0.5%–1.0% for the last 20 years. The constant data has been very discordant with the changes in practice that we have seen recently, and the increased concentration/discussion regarding a increasing (sic) risk of rupture.

Luckily, several recent publications add significant information to our understanding of vaginal birth after cesarean (VBAC) and suggest that a reversal of the dramatic move away from VBAC may be in order. Nationally, the number of hospitals offering VBAC services has decreased dramatically over the past several years. Of those facilities that do offer VBAC, some allow a trial of labor for women in spontaneous labor but will not offer augmentation or induction of labor. Also, some hospitals restrict a trial of labor to women with only one prior cesarean delivery, even for those women who have had a previous vaginal birth. As I.H.S. facilities with full scope Ob/Gyn departments have largely continued to offer VBAC services, it is encouraging to see VBAC re-evaluated from a more balanced and evidence-based perspective.

Induction of Labor

This month ACOG issued a new Committee Opinion addressing the safety of induction of labor for patients who have had a prior cesarean delivery. The abstract states:

Induction of labor in women who have had cesarean deliveries may be necessary because of fetal or maternal indications. The potentially increased risk of uterine rupture should be discussed with the patient and documented in the medical record. Selecting women most likely to give birth vaginally and avoiding the sequential use of prostaglandins and oxytocin appear to offer the lowest risks. Misoprostol should not be used in patients who have had cesarean deliveries or major uterine surgery.

This Committee Opinion offers a concise review of recent studies of VBAC and induction of labor and points out that previous studies may have overestimated the risk of uterine rupture with induction. For example, the study by Lydon-Rochelle et al. was a retrospective, population-based study relying on ICD-9 codes for diagnosis of uterine rupture. Lydon-Rochelle reported the following rupture rates: 0.16% for repeat cesarean delivery, 0.52% for spontaneous labor, 0.77% for labor induced without prostaglandins, and 2.4% for labor induced with prostaglandins. The Committee Opinion notes that there was no significant difference in the rates of uterine rupture with spontaneous labor or labor induced without prostaglandins in this study.

More recent literature about induction is also presented. This includes the prospective multi-center observational study by Landon, et al., where the outcomes experienced by 33,699 women with previous cesarean deliveries were analyzed. Chart review confirmed 124 cases of uterine rupture in the 17,898 women undergoing a trial of labor, with the following rates: 0.4% for spontaneous labor, 0.9% for augmentation of labor, and 1% for induction of labor. Additionally, this study reports a risk of rupture of 1.1% with oxytocin alone, 0.9% with mechanical dilation (+ oxytocin), and 1.4% when prostaglandins and oxytocin were used in combina-

(continued on page 14)

THIS MONTH

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Solstice

Native Americans have created countless stone structures linked to equinoxes and solstices. Many are still standing. One was called Calendar One by its modern-day finder. It is in a natural amphitheatre of about 20 acres in size in Vermont. From a stone enclosure in the center of the bowl, one can see a number of vertical rocks and other markers around the edge of the bowl "At the summer solstice, the sun rose at the southern peak of the east ridge and set at a notch at the southern end of the west ridge."

The winter solstice and the equinoxes were similarly marked.

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

Aug 2006

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

Quote of the month

"Of course, it is important to be a good listener – but it also pays sometimes, to be a little deaf"
—Yiddish Proverb for newlyweds

Articles of Interest

Outcomes among newborns with total serum bilirubin levels of 25 mg per deciliter or more.
N Engl J Med. 2006 May 4;354(18):1889-900

Neonatal hyperbilirubinemia--what are the risks?
N Engl J Med. 2006 May 4;354(18):1947-9.

An assessment of neurodevelopmental outcome in 140 infants at term or near term with total serum bilirubin levels > 25mg/dl. 130 patients had bilirubin levels > 25 mg/dl and <30 mg/dl while 10 infants had bilirubin levels > 30 mg/dl. 135 patients were treated with phototherapy alone and 5 patients received exchange transfusions.

No patient had kernicterus. There was no increase in the number of patients with abnormal neurological findings on exam or documented diagnoses of neurological abnormalities compared to control infants. Patients with positive direct antiglobulin tests had lower scores on cognitive tests but no more neurologic or behavioral problems.

Editorial Comment

This study is reassuring that bilirubin levels of < 30 mg/dl are unlikely to put an infant at risk for kernicterus or adverse neurologic outcome. The one subgroup at higher risk are those with hemolytic disease and these patients should be treated more aggressively with phototherapy and exchange transfusion if indicated. This is consistent with the newest AAP guidelines on hyperbilirubinemia from 2004.

The editorial also notes that the biological risk for hyperbilirubinemia is genetically based. It is already known that the risk is higher in Asians and also in American Indians of the southwest. American Indian/Alaskan Native infants in general may be at higher risk than the general population for hyperbilirubinemia and deserve our extra attention.

For further reading:

Management of Hyperbilirubinemia in the Newborn Infant 35 or More Weeks of Gestation Pediatrics 2004 114: 297-316

Jaundice in Navajo neonates.
Clin Pediatr (Phila). 1992 Dec;31(12):716-8.

Exaggerated jaundice in Navajo neonates. The role of bilirubin production. Am J Dis Child. 1986 Sep;140(9):889-90.

Infectious Disease Updates

Rosalyn Singleton, MD, MPH

Vaccine: Update on New Recommendations

There have been so many new vaccine recommendations pouring out of the Advisory Committee on Immunization Practices (ACIP) that I decided a general update was in order (I can barely keep these all straight and this is my job!):

1. **Menactra®** (meningococcal conjugate) vaccine was in the news because of a vaccine shortage. The ACIP recommends deferring the doses in 11-12 year old and concentrating on the 15 year olds and college freshmen entering dorms. We are changing the RPMS forecasting in late summer so that it only forecasts for 15 year olds.
2. **RotaTeq®** (rotavirus) vaccine provisional recommendations have been published: RotaTeq is recommended as a 3 dose oral vaccine for children 6-32 weeks. The first dose must be given before 13 weeks of age, or you don't start the series, and the last dose must be given by 32 weeks of age. The unique forecasting for this vaccine will be included in the late summer RPMS patch.
3. **Gardasil®** (Human papillomavirus – HPV) vaccine is licensed for 9-26 year old females and the ACIP has recommended HPV vaccine for routine vaccination of 11-12 year olds with catch-up for older ages. Gardasil will be eventually covered under Vaccine for Children Program; however, we are still waiting for news of a federal contract for this vaccine (anticipated in Fall) and ACIP recommendations have not yet been published.
4. **Varicella vaccine** – the ACIP just voted for a routine 2nd dose of Varicella to be given at school entry (4-6 years of age). This recommendation will be included in the RPMS forecasting in the late summer RPMS Immunization patch.

Recent literature on American Indian/ Alaskan Native Health

Doug Esposito, MD

Mental disorders among parents/caretakers of American Indian early adolescents in the Northern Midwest. Soc Psychiatry Psychiatr Epidemiol. 2006 Jun 15; [Epub ahead of print]

Summary

This study employed a culturally modified version of the University of Michigan Composite International Diagnostic Interview (UM-CIDI) to investigate the 12-month and lifetime prevalence of five DSM-III-R diagnoses among 861 Northern Midwest American Indian and Canada First Nations parents and caretakers of 10-12 year-old children. The five conditions assessed were alcohol abuse, alcohol dependence, drug abuse,

major depressive disorder, and generalized anxiety disorder. Prevalence rates were then compared to rates reported from studies of a Northern Plains and a Southwest American Indian culture, and to the general U.S. adult population. The authors discuss their findings in the context of the inherent difficulties faced when studying small, culturally distinct, and often geographically isolated Native populations in the U.S. and Canada. They scrutinize method variance as a possible source for divergent prevalence rates for some psychiatric disorders reported in studies of different cultural groups.

Study subjects were from four American Indian reservations in the Northern Midwest and five Canada First Nation reserves, all of whom share a common cultural tradition and language. The authors report a lifetime prevalence of 74.6% of at least one of the five conditions assessed, with males being more likely than females to meet these criteria. Nearly 32% of the adult parents and caretakers satisfied criteria for two or more of the surveyed conditions. Females were almost twice as likely as males to be without any of the five surveyed conditions over their lifetimes in this study.

As expected, substance abuse disorder rates were high, with 49.6% of respondents meeting criteria for alcohol abuse, 20.9% for alcohol dependence, and 22.4% for drug abuse. Statistically significant male to female differences were identified for alcohol dependence and drug abuse only, with the prevalence in males exceeding females.

A lifetime prevalence of 17.1% for major depressive disorder and 4.5% for generalized anxiety disorder was found. Both conditions were more prevalent in females than males in this study.

Comparisons were made to the National Comorbidity Survey (NCS) and the American Indian Service Utilization, Psychiatric Epidemiology, Risk and Protective Factors Project (AI-SUPERPFP). These assessment tools were similar, but not identical, to the methodology used to survey the study population. Suffice it to say that there were inter-study differences in prevalence rates for four of the five DSM-III-R diagnoses surveyed. A thorough review of the methodological issues that might account for these inter-study differences is offered, but is beyond the scope of this review. The interested reader is encouraged to review the paper in its entirety.

Editorial Comment

The findings reported by the authors of this study are WAY concerning! The high lifetime prevalence rates for the five diagnoses surveyed reflect the distress of our American Indian and Canada First Nations families. And, these are only five out of the total universe of diagnoses that might have been investigated!

Correctly, the authors state: "These findings have serious implications for effective parenting and family functioning. The prevalence rates also call attention to the need to improve access, identify and eliminate cultural barriers, and improve funding for mental health service among Northern Midwest and Canadian First Nations people." I suggest this is true for essentially all AI/AN and Canada First Nations populations, both rural and urban.

Last month, I reviewed an article authored by researchers from The National Center for American Indian and Alaska Native Mental Health Research, University of Colorado Health Sciences Center. This institution continues to offer an important body of information regarding the mental health status of American Indian groups. Though not the authors of the article currently under review, they are the originators of the AI-SUPERPFP and the litany of related reports and articles that are extensively referenced.

The authors of this month's article pay homage to the originators of the AI-SUPERPFP by stating "The first publications from the AI-SUPERPFP data are radically changing the landscape of American Indian psychiatric epidemiology by providing the first population sample that can be compared to national psychiatric epidemiological surveys. This important study will become the benchmark for future research on psychiatric disorders in American Indian populations... Researchers are now in a position to replicate AI-SUPERPFP work with other Native cultures to provide cumulative and comparable information that will inform policy makers and service providers regarding potential systematic differences in prevalence rates across cultures."

The importance of this comment cannot be overstated. There is a cumulative value for each and every published report related to the health of AI/AN and Canada First Nations peoples. One-by-one, greater light is shed on the socioeconomic and health issues and disparities burdening these populations, bringing into crisper focus exactly what needs to be done. Someday, we will find a way to use this knowledge to achieve equity in health status for North American Native populations and once-and-for-all end the injustice.

Additional Reading

Social epidemiology of trauma between 2 American Indian reservation populations. Am J Public Health. 2005 May;95(5):851-9.

Cultural specificity and comparison in psychiatric epidemiology: walking the tightrope in American Indian research. Cult Med Psychiatry. 2003 Sep;27(3):259-89.

Prevalence of mental disorders and utilization of mental health services in two American Indian reservation populations: mental health disparities in a national context. Am J Psychiatry. 2005 Sep;162(9):1723-32.

From Your Colleagues:

Carolyn Aoyama, HQE

New Women's Health Work Group Forming: Looking for interested volunteers

I want people for whom women's health is their true calling – people who are passionate about some part of women's health care—to join me in forming an IHS Workgroup on Women's Health. There are people out there who are local experts on mobilizing women to come in for their PAP smears, or their mammograms. There are others who care about access to high quality behavioral health services for women. Maternal/Child Health advocates who are especially interested in the "M" in MCH would be invaluable. How about chronic disease, or other health issues?

I am interested in forming a Women's Health Workgroup with people who would be willing to serve in an advisory capacity to me. I value the advice of IHS staff that are passionately interested in expanding services that will improve access, quality and health outcomes of AI/AN women. One of the first things I want to work on is an IHS Women's Health Strategic Plan. Please email me if you would be interested in serving in this advisory capacity.

I need your perspective, experience, and ideas.

Carolyn.Aoyama@ihs.gov

Hot Topics

Obstetrics

Update your standing post partum discharge orders: Tdap in pregnancy/postpartum

ACIP just came out with new provisional recommendations among Pregnant women. The ACIP recommends that Tdap be given routinely in the postpartum period before discharge if 2 or more years have elapsed since the last Td. The reason for these recommendation is that mothers are the source of 32% of pertussis that occurs in infants.

Other recommendations:

- Health Care Workers the ACIP also recommends Tdap if it's been 2 or more years since last Td.
- Adolescents up to 18 ACIP recommends Tdap if it's been 5 or more years since last Td.
- Other adults <65 Tdap is recommended if it's been 10 years since last Td.

OB/GYN CCC Editorial

At some point soon it would be worthwhile considering update your standing orders for Tdap before postpartum discharge. The new provisional recommendations for pregnant women and the recommendations for Tdap in adults are at the link below and they will become official when published in CDC's Morbidity and Mortality Weekly Report (MMWR).

Repeat Cesarean Deliveries Raise Risk of Maternal Morbidity

As the number of repeat cesarean deliveries increases, so does the risk of bowel injury, ICU admission, and other maternal complications,

CONCLUSION: Because serious maternal morbidity increases progressively with increasing number of cesarean deliveries, the number of intended pregnancies should be considered during counseling regarding elective repeat cesarean operation versus a trial of labor and when debating the merits of elective primary cesarean delivery. LEVEL OF EVIDENCE: II-2.

Silver RM, et al Maternal morbidity associated with multiple repeat cesarean deliveries. Obstet Gynecol. 2006 Jun;107(6):1226-32.

Membrane Sweeping at 41 Weeks Helps Prevent Post-Term Pregnancy

CONCLUSIONS: Membrane sweeping at 41 weeks can substantially reduce the proportion of women with post-term pregnancy.

de Miranda E, et al Membrane sweeping and prevention of post-term pregnancy in low-risk pregnancies: a randomised controlled trial. BJOG. 2006 Apr;113(4):402-8.

Most Stillbirths Worldwide Are Preventable

INTERPRETATION: The numbers of stillbirths are high and there is a dearth of usable data in countries and regions in which most stillbirths occur, with under-reporting being a major challenge. Although our estimates are probably underestimates, they represent a rigorous attempt to measure the numbers of babies dying during the last trimester of pregnancy. Improving stillbirth data is the first step towards making stillbirths count in public-health action.

Stanton C, et al Stillbirth rates: delivering estimates in 190 countries. Lancet. 2006 May 6;367(9521):1487-94

Sudden infant death syndrome and complications in other pregnancies

INTERPRETATION: Women whose infants die from SIDS are more likely to have complications in their other pregnancies. Recurrence of pregnancy complications predisposing to SIDS could partly explain why some women have recurrent SIDS.

Smith GC, et al Sudden infant death syndrome and complications in other pregnancies. Lancet. 2005 Dec 17;366(9503):2107-11.

Gynecology

ACOG Releases HPV Vaccine Recommendations for Ob-Gyns

Washington, DC—The American College of Obstetricians and Gynecologists today released clinical recommendations for females ages 9 to 26 for the human papillomavirus (HPV) vaccine in advance of their publication in the September 2006 issue of Obstetrics & Gynecology. A new committee opinion offers general information about the vaccine and addresses proper administration, precautions, and contraindications.

"The approval of this vaccine represents a significant development in women's health and the fight against cancer. Obstetrician-gynecologists should be proactive in educating our patients about the vaccine so that as many women as possible are able to take advantage of this medical milestone," said ACOG President Douglas W. Laube, MD, MEd. "We must be prepared both to administer the vaccine and to answer patient and parent questions that will arise," Dr. Laube added.

"Ob-gyns will play a critical role in the vaccine's widespread use in girls and women and we should discuss vaccination with our patients. Additionally, ob-gyns should stress the importance of continued cervical cytology screening regardless of vaccination status," Dr. Laube added.

Despite the protection the vaccine offers, ACOG emphasizes that the recommendations for cervical cytology screening remain unchanged. Pap screening should begin within three years of sexual intercourse (or by age 21) and then annually until age 30. After age 30, most women can continue annual testing or can choose to be tested every two to three years after three consecutive negative Pap tests. While the vaccine protects against HPV types 6, 11, 16, and 18, there are additional HPV strains that can cause cervical cancer. Pap testing can detect abnormal cervical cells caused by other HPV strains not covered by the vaccine.

The HPV vaccine is most effective when administered to girls and women before the onset of sexual activity. While the US Food and Drug Administration has approved the vaccine for girls and women ages 9 to 26, the federal Advisory Committee on Immunization Practices recommends that girls routinely receive the vaccine between the ages of 11 and 12. Although most ob-gyns are not likely to see many girls in this age group, ACOG recommends that teens first visit an ob-gyn between the ages of 13 and 15. This initial reproductive health visit is an ideal time to discuss the benefits of the vaccine and to offer it to teens.

Vaccination is also recommended for women up to age 26, regardless of sexual activity. Ob-gyns are encouraged to talk about the vaccine any time they see a patient within the target population and offer it to those who have not yet received it. However, women who are already sexually active should be counseled that the vaccine may be less effective if there has been prior HPV exposure.

Women who previously have had abnormal cervical cytology, genital warts, or precancerous lesions can be vaccinated. Those with suppressed immune systems also can be vaccinated, although the protection may be less than that of patients with normal immune function. The HPV vaccine is not a treatment for current HPV infection or genital warts. Patients undergoing treatment for HPV-related symptoms (cervical cytology abnormalities, genital warts) should continue with their prescribed medication and therapy.

While the vaccine has not been shown to have a harmful effect on pregnancy, it is not recommended that pregnant women be vaccinated. If a woman discovers she is pregnant during the vaccine schedule, she should delay finishing the series until after she gives birth. Women who are breastfeeding can receive the vaccine.

The recently approved vaccine shows great promise for controlling the spread of the main types of HPV that cause cervical cancer and genital warts. Given in a series of three shots over six months, the vaccine protects against four strains of HPV responsible for 70% of cervical cancers and 90% of genital warts cases. With widespread use, HPV vaccination has the potential to lower the occurrence of cervical cancer in future generations. Worldwide, cervical cancer is the second leading cause of cancer death in women with nearly half a million new cases and 275,000 deaths annually. An increase in routine Pap testing has led to a decrease in new cases and death (9,710 and 3,700 respectively) from cervical cancer in the US, but there is still a significant population of women who are not regularly screened.

OB/GYN CCC Editorial

Will widespread human papillomavirus prophylactic vaccination change sexual practices of adolescent and young adult women in America?

Two virus-like particle human papillomavirus (HPV) vaccines have been shown to be nearly 100% effective in preventing type-specific persistent HPV infections and associated type-specific high-grade cervical intraepithelial neoplasia (CIN). Recently, it has been hypothesized that the administration of this vaccine to young girls in the United States might increase sexual promiscuity among adolescent women and/or young adults. Thus, it has been suggested that focused vaccine strategies either based on the risk of CIN or gender might be more rational or cost-effective. However, such strategies are unlikely to completely eradicate the burden of this disease and decrease the cost of cervical cancer screening.

The same misguided rationale above was used during implementation of the hepatitis B vaccine.

The suggestion that widespread vaccination will alter sexual practices is refuted and the rationale for the vaccination of all girls and boys is outlined in the Monk and Wiley Commentary below. Here is part of that commentary:

"Seat belts do not cause reckless driving, tetanus shots do not cause children to seek out rusty nails, and hepatitis B vaccination has not altered sexual practices or increased injection-drug abuse in any population. Preventive measures do not always lead to high-risk behavior. It is naïve to think that abstinence and monogamy will eradicate the morbidity and mortality of cervical cancer as suggested by some conservative organizations. Society needs to emphasize the benefits of HPV vaccination and find ways to increase its adoption and not create ill-founded barriers. Support and approval of HPV vaccination is not synonymous with support and approval of promiscuity rather a cry to rally together to eradicate cervical cancer worldwide."

Resources: Online

(continued on page 6)

Domestic violence

Physical Dating Violence Common Among Teens, Linked to Risky Behaviors

Nearly 1 out of 11 US high school students is subjected to physical violence from their boyfriend or girlfriend each year, the results of a nationwide survey suggest -- and boys are just as likely as girls to be the victim of such violence, according to a report in the May 19th issue of the Morbidity and Mortality Weekly Report . The study also confirms that these victims of violence have an increased prevalence of high-risk behaviors.

Physical Dating Violence Among High School Students --- United States, 2003 MMWR May 19, 2006 / 55(19);532-535

(Hot Topics, continued from page 5)

Urodynamics-based detrusor overactivity diagnoses may be insufficiently reliable

CONCLUSION: In our group, lower urinary tract diagnoses of stress urinary incontinence from both clinical and urodynamic data demonstrated substantial reliability and interobserver agreement. However, by conventional interpretation of kappa-statistics, reliability of diagnoses of detrusor overactivity or voiding dysfunction was only moderate, and interobserver agreement on these diagnoses was no better than fair. Urodynamic interpretations may not be satisfactorily reproducible for these diagnoses. LEVEL OF EVIDENCE: II-2.

Whiteside JL,Reliability and agreement of urodynamics interpretations in a female pelvic medicine center. Obstet Gynecol. 2006 Aug;108(2):315-23

HPV-Based Triage May Result in Excess Colposcopies in Young Women

Although women 25 years old or younger have a high prevalence of human papillomavirus (HPV) infection and low-grade cytologic abnormalities, high-grade dysplasia in this age group is relatively uncommon, researchers have found.

CONCLUSION: Given the high prevalence of human papillomavirus and low occurrence of high-grade lesions in young women with atypical squamous cells of undetermined significance, a human papillomavirus-based triage strategy will result in the referral of a large number of women for colposcopy and may limit its cost-effectiveness. LEVEL OF EVIDENCE: III.

Wright JD, et al Human papillomavirus triage for young women with atypical squamous cells of undetermined significance. Obstet Gynecol. 2006 Apr;107(4):822-9

Child Health

Emergency Contraception: A Primer for Pediatric Providers

Emergency contraception (EC) is a contraceptive method used safely and successfully by women for more than 30 years to prevent pregnancy. Nurses at all levels are often the first point of contact for a woman who is requesting EC, thus it is particularly important for them to stay abreast of both the facts regarding the use of this product and the current political controversies. It is particularly important for Nurse Practitioners (NPs) working in primary care with adolescents to remain cognizant of the significant barriers that remain for many women of all ages trying to access this important contraceptive tool.

Clements AL, Daley AM. Emergency contraception: a primer for pediatric providers. Pediatr Nurs. 2006 Mar-Apr;32(2):147-53

Chronic disease and Illness

Antidepressant Discontinuation Syndrome

Antidepressant discontinuation syndrome occurs in approximately 20 percent of patients after abrupt discontinuation of an antidepressant medication that was taken for at least six weeks. Typical symptoms of antidepressant discontinuation syndrome include flu-like symptoms, insomnia, nausea, imbalance, sensory disturbances, and hyperarousal. These symptoms usually are mild, last one to two weeks, and are rapidly extinguished with reinstitution of antidepressant medication. Antidepressant discontinuation syndrome is more likely with a longer duration of treatment and a shorter half-life of the treatment drug. A high index of suspicion should be maintained for the emergence of discontinuation symptoms, which should prompt close questioning regarding accidental or purposeful self-discontinuation of medication. Before antidepressants are prescribed, patient education should include warnings about the potential problems associated with abrupt discontinuation. Education about this common and likely underrecognized clinical phenomenon will help prevent future episodes and minimize the risk of misdiagnosis.

Am Fam Physician 2006;74:449-56, 457

Features

American Family Physician**

Patient-Oriented Evidence that Matters (POEMS)*

Norethindrone More Effective for Menses Suppression

CLINICAL QUESTION: Do oral contraceptives containing norethindrone acetate or levonorgestrel differ in their effect on suppression of menses with continuous use?

SYNOPSIS: There were 139 women enrolled in this double-blind, four-arm trial of oral contraceptives used continuously for 180 days for the purpose of suppressing menstrual periods. The estrogen used in all study arms was ethinyl estradiol (E2), which could be at a dose of 20 mcg or 30 mcg. The progestin was 1 mg norethindrone acetate (Loestrin) or 100 mcg levonorgestrel (Seasonale). The four study arms included: (1) norethindrone acetate plus 20 mcg ethinyl E2; (2) norethindrone acetate plus 30 mcg ethinyl E2; (3) levonorgestrel plus 20 mcg ethinyl E2; and (4) levonorgestrel plus 30 mcg ethinyl E2.

All study participants had used cyclic oral contraceptives for at least three months before randomization. This study had an overall dropout rate of 45 percent. More days of amenorrhea were recorded in the norethindrone acetate groups, with no difference between the lower versus higher estrogen dosing (mean days of amenorrhea during 180 days' use: norethindrone acetate plus 20 mcg ethinyl E2 = 164, levonorgestrel plus 20 mcg ethinyl E2 = 151; P = .02).

BOTTOM LINE: In continuous dosing regimens, more days of amenorrhea can be achieved with oral contraceptives containing 1 mg norethindrone acetate than with oral contraceptives containing 100 mcg levonorgestrel. (Level of Evidence: 2b)

Fecal Occult Blood Testing in Healthy Patients Does Not Reduce Mortality

CLINICAL QUESTION: Does fecal occult blood testing (FOBT) reduce all-cause mortality?

SYNOPSIS: The idea behind screening tests is that they may detect something in otherwise healthy persons that will help them live longer, making all-cause mortality the most important outcome measure of any screening. This study tried to determine if FOBT reduces all-cause mortality. The authors combined data from three large published randomized trials of FOBT: one Danish, one British, and one American. All studies compared FOBT, performed every two years, with no screening.

The British and Danish studies used unrehydrated FOBT in adults 45 to 75 years of age; the American study used rehydrated FOBT in adults 50 to 80 years of age. All three studies monitored patients for a mean of 12 years; which means that 245,217 persons were followed up for more than 3 million patient years. Overall, there was a 13 percent relative reduction in colorectal cancer mortality. In absolute terms, dividing the total colorectal cancer deaths by total participants, that is 0.82 versus 0.94 percent (P = .002; number needed to treat = 833 for 12 years).

There was a 1.9 percent relative increase in noncolorectal cancer deaths in the nonscreened group, and no overall difference between groups in all-cause mortality (26.51 for screened and 26.46 for nonscreened patients). Potential explanations for this paradox include unintended consequences of screening (e.g., failure of the patient to adopt a healthier lifestyle because he or she has been screened, mortality from follow-up colonoscopy) and better identification of colorectal cancer as a cause of death in screened patients.

BOTTOM LINE: Screening for colorectal cancer using FOBT does not reduce all-cause mortality. This is important when considering whether to screen healthy patients. (Level of Evidence: 1a)

Announcements from the AAP Indian Health Special Interest Group

Sunnah Kim, MS

Locums Tenens and Job Opportunities

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

ACOG

Induction of Labor for Vaginal Birth After Cesarean Delivery

(Also see Abstract of the Month)

ABSTRACT: Induction of labor in women who have had cesarean deliveries may be necessary because of fetal or maternal indications. The potentially increased risk of uterine rupture should be discussed with the patient and documented in the medical record. Selecting women most likely to give birth vaginally and avoiding the sequential use of prostaglandins and oxytocin appear to offer the lowest risks. Misoprostol should not be used in patients who have had cesarean deliveries or major uterine surgery.

Induction of labor for vaginal birth after cesarean delivery. ACOG Committee Opinion No. 342. American College of Obstetricians and Gynecologists. Obstet Gynecol 2006;108:465–67.

Breastfeeding

Suzan Murphy, PIMC

Early Milk Supply Issues

Providers who work with new families usually hear lots of versions about "not enough milk" concerns. Phrases like:

- I don't think that I have enough milk
- I don't think I have any milk because I didn't leak while I was pregnant
- My breasts are flat
- There is nothing coming out
- The baby is hungry all the time

usually mean that the mom/family is worried, scared, and unaware of how to know if their baby is getting enough to eat. The following are ways to assess adequate intake and help guide families in the first weeks.

Reasonable expectations for intake and feeding behavior in a normal, healthy baby are:

- Birth – 24 hours
  - Effective latch at birth, lots of sleep, and sleepy feeds. 2-3 feedings (including latch at birth) in the first 24 hours is success.
- 24 hours and until the white ("mature") milk comes in
  - The first milk, colostrum is thick (like honey), hard to suck out, and harder to see. The average amount consumed at each feeding is 5 cc (1 tsp). The baby's stomach size is 5-10cc at birth, expanding to about 60 cc (2 oz) at 1 week. The mother's colostrum and white milk production increases as the baby's stomach expands.
  - Feedings averaging every 2-3 hours – 8-12 times in 24 hours are important—they help insure adequate intake and stimulate the mom's milk supply. Wake the baby as needed.
  - Frequent feedings are normal. Babies often get fussy at feedings, perhaps because their mouths are tired from learning how to suck. They get stronger quickly. It will be easier once the white milk comes in.
  - Expect one diaper change for every day of life. For example if the baby is 3 days old, 3 diaper changes tells the mom that the baby is getting enough.
- By 2-5 days, the white milk is in.
  - Encourage the mom to feed every 2-3 hours to help prevent engorgement and insure adequate intake for the baby.
  - Watch for one diaper change for every day of life—up to 6 or more in 24 hours—this tells that mom that the baby is getting enough.
  - Once the baby is waking to eat, and diaper changes are 6 or more in 24 hours, the mom can relax a little and feed the baby on demand.
- Watch for:
  - < 7% weight loss in the first several days.
  - Birth weight re-gained by 2 weeks.
  - Weight gain of ½ oz to 1 oz per day in the first 3-6 months to double birth weight at 4-6 months and triple by one year.
- Growth spurts happen every couple weeks. The baby will suddenly want to eat more, all the time. The feeding frenzy will last 1-2 days, the mom's milk supply will increase to meet the need, and things will be fine.
- If the family wants to supplement, encourage them to use caution. Supplementing in the first weeks can undermine the mom's body's ability to maintain her supply.
- By 6-8 weeks, the baby' stomach is bigger, and the suck is much more efficient. Also the mom's body has become accustomed to the milk being there. The feedings are much shorter and less frequent, the mom's breasts are softer, and the leaking is almost gone. Breastfeeding is much easier.

Schanler R et al. Breastfeeding Handbook for Physicians, American Academy of Pediatrics and American college of Obstetricians and Gynecologists. 2006

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

Elder Care News

Is 75 Years an Appropriate Upper Age Limit for Mammography?

A major finding of this study is that the screening participation among elderly women is high. The outcomes of our study suggest a steadily increasing sojourn time of breast tumours beyond the age of 69, leading to a strong increase in detection of cancers, and therefore, disfavouring the balance with the benefits of screening. At present, 75 years of age can be regarded as an appropriate upper age limit for the Dutch programme.

Fracheboud J, et al Seventy-five years is an appropriate upper age limit f r population-based mammography screening. Int J Cancer. 2006 Apr 15;118(8):2020-5

Elder Care Initiative Directive: Editorial comment

Fracheboud J, et al set out to better understand the risk/benefit ratio of screening mammography in women aged 70-75 when the Dutch breast cancer screening program raised its upper age limit from 69 to 75 based on models suggesting benefit to these older women. It is well known that breast cancer incidence increases with increasing age, but that cancers in older women tend to progress more slowly and that death from other causes also increases with age.

While a screening program is more likely to detect cancer in these older women than in women younger than 69, the cancers detected are less likely, without early detection, to cause death. This study (by the authors' own admission) adds little to the existing understanding, but it certainly provides no evidence to argue against screening in these older women and does point out that screening was well accepted (65.6% of women aged 70-75 accepted appointments for screening mailed to them).

An upper limit of mammography screening is supportable on a population basis but much less so when faced with the particulars of an individual patient. Walter and Covinsky provide an approach mimics (in a more formal way) the thought processes of many clinicians. They calculate the number needed to screen for women in the highest, middle, and lowest quartiles of life expectancy for selected age groups. The results can be quite striking: the number needed to screen to prevent one cancer death in an 80 year old in the highest quartile of life expectancy is quite close to that for a 50 year old woman in the lowest quartile (240 and 226 respectively). Women unlikely to benefit from mammography should not be subjected to the test or the inevitable cascade of medical events that follow, but age is not, by itself, a satisfactory indicator of likelihood of benefit. Walter and Covinsky provide an evidence-based approach for better advising our older patients.

Walter LC, Covinsky KE. Cancer screening in elderly patients: a framework for individualized decision making. JAMA. 2001 Jun 6;285(21):2750-6

Special thanks to Bruce Finke, Elder Care Directive

Alaska State Diabetes Program

Barbara Stillwater

Obese Girls: 3x Risk of Early Death than Slim Counterparts

Among more than 100,000 women in the Nurses' Health Study II, those with a body mass index (BMI) greater than 30 kg/m2 when age 18 had a nearly threefold risk for premature death compared with women with BMIs below 18.5 kg/m2 at age 18. Effects of childhood overweight on quality of life at younger ages may be substantial, and higher mortality rates in middle age may represent 'the tip of the iceberg' of detrimental health consequences. Our findings support preventive action in children aimed at reducing their risk for becoming overweight.

Women with higher BMIs in their late teens were at greater risk of premature death. Compared with women who had a BMI between 18.5 and 21.9 kg/m2 at age 18, the hazard ratio for premature death for women between the ages of 22 and 44 at baseline was 0.98, for those with a BMI less than 18.5 kg/m2, 1.18 for a BMI of 22.0 to 24.9 kg/m2, 1.66 for a BMI of 25.0 to 29.9 kg/m2 , and 2. for a BMI of 30 kg/m2 or greater.

During adolescence, women with a higher BMI at age 18 years had higher levels of alcohol consumption, were more likely to smoke cigarettes, and were less likely to engage in physical activity or use oral contraceptives.

This paper underscores the importance of efforts to prevent excessive weight gain in children, not only to prevent obesity but also to prevent moderate overweight.

Given the prevalence of overweight, large-scale preventive strategies aimed at increasing physical activity and stimulating healthy eating habits in U.S. children and adolescents are warranted.

Practice Pearl

Explain to interested patients that this study adds to the substantial body of evidence indicating that excessive weight in childhood is associated with significant negative health consequences later in life, including increased risk for premature death.

Van Dam RN et al. The Relationship between Overweight in Adolescence and Premature Death in Women. Ann Intern Med. 2006 Jul 18;145(2):91-7.

International Health Update

Claire Wendland, Madison, WI

HIV/AIDS in Latin America and the Caribbean

This month the sixteenth international AIDS conference will be held in Toronto. In a fascinating series of articles, Science reporter Jon Cohen documents the state of the epidemic in Latin America and the Caribbean, where typical modes of transmission, economic and social conditions, and government response vary dramatically from country to country. (In Puerto Rico, for instance, injection drug use is a major vector of HIV transmission; in the Caribbean sex tourism is a significant part of the problem. In Argentina, it's a primarily heterosexual epidemic, while in Mexico and much of the rest of Central America, men who have sex with men are the major group at risk.)

Cohen's look at Brazil is particularly interesting. When expensive multi-drug regimens first proved effective at controlling HIV in 1996, Brazil's government inspired activists and troubled corporate leaders around the world by not only mounting a strong prevention campaign, but by promising free antiretrovirals to any citizen who needed them – in part by negotiating aggressively with BigPharma, in part by manufacturing cheap knockoffs of drugs domestically. At the time, Brazil had the worst epidemic in the region. Ten years later, HIV prevalence rates are less than half of what had been predicted, and the Ministry of Health says 90,000 deaths have been averted. But increasing drug resistance among patients on long-term antiretroviral treatment means the country is spending more and more on second-line patented medications. Many critics, both on the left and the right, believe Brazil's universal access program will not be sustainable for much longer. Will the country be the first to break patent restrictions under the so-called "compulsory licensing" clause of the World Trade Organization's intellectual property rights act? Though this clause was meant to ensure that countries could manufacture affordable medications in a public health emergency, no government has yet invoked it for fear of the trade sanctions that would likely follow. HIV-infected Brazilians, and health workers in poor and middle-income countries around the world, watched the Brazilian government take the lead on universal access ten years ago; they—and we—are now waiting to see what the next move will be.

Cohen J. Brazil: ten years after. Science 313:484-7, 28 Aug 2006

Elder Care

Performance by Elderly on 400-Meter Walk Predicts Disability and Death

CONCLUSIONS: Older adults in the community who reported no difficulty walking had a wide range of performance on this extended walking test. Ability to do the test and performance were important prognostic factors for total mortality, cardiovascular disease, mobility limitation, and mobility disability in persons in their eighth decade.

Newman AB, et al Association of long-distance corridor walk performance with mortality, cardiovascular disease, mobility limitation, and disability. JAMA. 2006 May 3;295(17):2018-26

Medical Mystery Tour

First trimester screening: How would you counsel this patient?

Ms. L. is a 40 y/o G1P0 at 9 weeks gestation (by a 6 week ultrasound) and is aware of her age-related risks for fetal aneuploidy. She inquires about the possibility of early screening. Which ONE of the statements below is the most accurate way to counsel her:

A. Ultrasonic measurement of fetal nuchal translucency combined with biochemical tests between 11 and 13 weeks may detect close to 90% of chromosomally abnormal fetuses

B. Early trimester screening has a better detection rate, but a higher false positive rate, than midtrimester screening

C. Women who have first trimester screening that is negative will not need further testing

Stay tuned till next month to find out more (or see comment below)

OB/GYN CCC Editorial

For more background on this and other Prenatal genetic screening questions, please go to this free CME module which is also just a great resource

Prenatal genetic screening: Serum and ultrasound

www.ihs.gov/MedicalPrograms/MCH/M/TM01.cfm

Midwives Corner

Lisa Allee, CNM, Chinle

VBAC: Pendulums and Ecstasy

The first article I'll review is yet another nudge for the pendulum to swing back to sanity for VBACs in this country and the second article has some thought-provoking information on ways to enhance the natural birth process, VBAC or not, but certainly incredibly relevant to supporting women in achieving successful VBACs.

Landon, et al, in a large multi-center prospective observational study found that women with histories of multiple cesarean deliveries are not at higher risk for uterine rupture than women with single prior cesarean deliveries, 0.9% and 0.7% respectively. (Also notice how low these rates are—less than 1%, less than 1 in a hundred!!) They also found that while having had a prior vaginal delivery was protective for uterine rupture, it was not significant enough to warrant requiring this in order to be a VBAC candidate.

They did find that "the risks of other adverse maternal events (hysterectomy and transfusion) is increased in women with multiple prior cesarean deliveries, but the absolute level of these risks is small" (3.2% and 0.6% respectively.) Another finding was that pitocin induction or augmentation, epidural, and less than 2 years since the cesarean delivery were associated with higher rates of uterine rupture. Perinatal outcomes of term infants were no different in women with one or multiple prior cesarean deliveries and in women with trials of labor or elective repeat cesarean.

Ecstatic Birth

In the second article Ecstatic Birth, Sarah Buckley, MD writes eloquently and informatively about the hormonal aspects of labor, birth, postpartum, and breastfeeding. She covers oxytocin, the love hormone and mediator of all the ejection reflexes—sperm, baby, placenta, and milk; beta-endorphins, our naturally occurring analgesics levels of which rise and rise during labor; catecholamines that inhibit oxytocin and blood flow to the uterus when stimulated by fear and anxiety; and prolactin the milk and protection hormone. She discusses the ways in which this hormonal mix is essential to the normal processes of giving birth, breastfeeding, and bonding and ways that it can be supported and enhanced. She draws the parallel of the hormones of birthing a baby being the ones involved in making the baby and, thus, the possibility of ecstatic birth. She also reviews the ways in which interventions such as induction or augmentation of labor, analgesia or anesthesia, cesarean delivery, and early separation can wreak havoc on this beautifully crafted hormonal milieu.

She closes the article with a beautiful quote from Dutch professor of obstetrics G. Kloosterman: Spontaneous labour in a normal woman is an event marked by a number of processes so complicated and so perfectly attuned to each other that any interference will only detract from the optimal character. The only thing required from the bystanders is that they show respect for this awe-inspiring process by complying with the first rule of medicine--nil nocere [do no harm].

Buckley, S Ecstatic Birth: The hormonal blueprint of labor. Mothering. 2002 March-April; 111: 51-61.

Editorial Comment Lisa Allee, CNM

Landon's article is yet more evidence that VBAC should be available and encouraged for most women with a prior cesarean delivery, or cesarean deliveries. This research was reported in USA Today and in the article the chairman of the ACOG practice committee was quoted as saying that he expects his group to revise their VBAC recommendations. Hallelujah! Let's hope they even change that fateful wording "immediately available" back to the much more helpful "readily available" so even women in rural and small towns and cities can have VBACs again!

The second article is not from a peer reviewed journal, but check out the references and see that many of them are. This article gives scientific backing to the ancient art of midwifery--supporting women in their natural processes of giving birth. I included it here because while all women deserve us knowing and thinking about ways we can support, enhance, and, hopefully, not trample on their hormonal cascade for birth, women having a VBAC need us to do so even more. I fully admit that creating truly undisturbed births in most of our practice settings is difficult, if not impossible, but there are many, many things that we can do to move closer to that goal—speak softly and gently; make the surroundings comforting and soothing to all the senses; use words that induce calm and confidence, not fear and doubt; keep the sounds of other women giving birth to a minimum (close the door); turn down the lights; turn down the monitor; use touch and voice for relaxation; use relaxation, movement, water, massage, heat/cold, etc. for helping with pain instead of medications; welcome the people the woman loves; keep mothers and babies together….

These oxytocin-friendly procedures can help women VBAC successfully and decrease (dare I say prevent?) the need for the interventions Landon and others have found to increase the risk of uterine rupture, namely pitocin and epidurals. Our own hormones rock, let them flow!

Landon, M, et al , Risk of uterine rupture with a trial of labor in women with multiple and single prior cesarean delivery. Obstetrics & Gynecology.2006 Jul;108(1):12-20.

Buckley, S Ecstatic Birth: The hormonal blueprint of labor. Mothering. 2002 March-April; 111: 51-61

Nurses Corner

Native Alaskan and American Indian Nurses Scholarship Opportunity

I am writing to you about a scholarship opportunity for American Indian and Native Alaskan (AI/NA) Commission Corps Officers through the Native Nurses Career Opportunity Program. We are a small grant-based scholarship program funded by IHS at the University of Minnesota—School of Nursing. We award scholarships to AI/NA registered nurses pursuing their Master degree at the University of Minnesota School of Nursing. It is our goal to increase the number of Masters prepared AI/NA nurses. We have several scholarship recipients who are currently Commission Corps Officers and would like to get the word out to other Officers who might also benefit from our program.

The U of MN offers courses online and we encourage our students to stay and serve in their current communities. We also understand the nature of being a Commission Corps Officer and understand that our students need to respond when called to duty.

I would appreciate it if you would forward this e-mail to the appropriate person. We would like to send your office information regarding our scholarship program and would appreciate it if you could share the information with any American Indian and Native Alaskan officers looking to increase further their education. **NativeRN@umn.edu** or **www.nursing.umn.edu/NNCOP**

Oklahoma Perspective

Greggory Woitte—Hastings Indian Medical Center

The indications for IUD use have vastly expanded

Intrauterine devices are the most common reversible method of contraception worldwide. However, here in the US, less than 1% of contraceptive users use an IUD. Due to the Dalkon Shield controversy, many different forms of IUDs were removed from the market. Today, there are only two IUDs on the market here in the US, the copper T380A (Paraguard) and the Levonorgesterel intrauterine system (Mirena). Today's IUDs have corrected a design flaw that was unique to the Dalkon Shield and recent research has shown that they are safe and very effective, with pregnancy rates approaching that of tubal sterilization. The Levonorgesterel intrauterine system offers the non-contraceptive benefit of reducing menstrual flow and can be used for idiopathic menorrhagia. Recent evidence suggests that IUDs can be used in the Adolescent population and that 75% of adolescents that had IUDs placed were very happy with their contraceptive choice at 1 year. IUD use in the properly selected adolescent could be a useful weapon in the prevention of teenage pregnancy. One of the largest concerns with IUD use is the increased risk of pelvic infections which appears to be greatest at the time of insertion but returns to the background rate 1 month after insertion. Candidates for IUDs include:

- Multiparous and nulliparous women at low risk for STDs
- Women who desire long-term reversible contraception
- Women with the following medical conditions:
  - Diabetes, Thromboembolism, Menorrhagia/dysmenorrhea, breastfeeding, breast cancer, and liver disease
- When your next patient is searching for a contraceptive option, and isn't absolutely certain she does not want to have more children, an IUD is an excellent option.

Resources: Online

Perinatology Picks

George Gilson, MFM, ANMC

Glyburide flows from fetus to mother by placental transport system

RESULTS: There was highly significant transfer of glyburide against concentration gradient from the fetal to the maternal circulation. Fetal-to-maternal concentration ratio was 0.92 +/- 0.23 at the start of the experimental period and 0.31 +/- 0.47 3 hours later (P = .01) (n = 5). Verapamil did not modify glyburide transport.

CONCLUSION: This is the first direct evidence of active glyburide transport from the fetus to the mother and, in general, of any medicinal drug used during pregnancy. These experiments suggest that glyburide is actively efflux by a transporter other than P-glycoprotein. Alternatively, it is possible that a minority of glyburide is carried by P-glycoprotein, but most of the fetal load is pumped to the mother by a yet-unidentified placental transport system.

Kraemer J et al Perfusion studies of glyburide transfer across the human placenta: implications for fetal safety. Am J Obstet Gynecol. 2006 Jul;195(1):270-4.

Inappropriate Discontinuation of Asthma Medication Common in Early Pregnancy

CONCLUSIONS: Utilization of all categories of asthma medications decreased in early pregnancy, with the largest declines occurring for inhaled and rescue corticosteroids.

Enriquez R, et al Cessation of asthma medication in early pregnancy. Am J Obstet Gynecol. 2006 Jul;195(1):149-53

STD Corner

Lori de Ravello, National IHS STD Program

Condom Use and the Risk of Genital Human Papillomavirus Infection in Young Women

RESULTS: The incidence of genital HPV infection was 37.8 per 100 patient-years at risk among women whose partners used condoms for all instances of intercourse during the eight months before testing, as compared with 89.3 per 100 patient-years at risk in women whose partners used condoms less than 5 percent of the time (adjusted hazard ratio, 0.3; 95 percent confidence interval, 0.1 to 0.6, adjusted for the number of new partners and the number of previous partners of the male partner). Similar associations were observed when the analysis was restricted to high-risk and low-risk types of HPV and HPV types 6, 11, 16, and 18. In women reporting 100 percent condom use by their partners, no cervical squamous intraepithelial lesions were detected in 32 patient-years at risk, whereas 14 incident lesions were detected during 97 patient-years at risk among women whose partners did not use condoms or used them less consistently. Conclusions Among newly sexually active women, consistent condom use by their partners appears to reduce the risk of cervical and vulvovaginal HPV infection.

Winer RL et al Condom Use and the Risk of Genital Human Papillomavirus Infection in Young Women New England Journal of Medicine June 22, 2006 Volume 354: pages 2645-2654

COMMENTARY: Condoms and Sexually-Transmitted Infections

Steiner MJ et al New England Journal of Medicine. June 22, 2006 Volume 354: pages 2642-2643

Latest STD Treatment Guidelines Just Released, 2006, CDC

Summary

These guidelines for the treatment of persons who have sexually transmitted diseases (STDs) were developed by CDC after consultation with a group of professionals knowledgeable in the field of STDs who met in Atlanta, Georgia, during April 19–21, 2005. The information in this report updates the Sexually Transmitted Diseases Treatment Guidelines, 2002 (MMWR 2002;51[No. RR-6]).

Included in these updated guidelines are an expanded diagnostic evaluation for cervicitis and trichomoniasis; new antimicrobial recommendations for trichomoniasis; additional data on the clinical efficacy of azithromycin for chlamydial infections in pregnancy; discussion of the role of Mycoplasma genitalium and trichomoniasis in urethritis/cervicitis and treatment-related implications; emergence of lymphogranuloma venereum protocolitis among men who have sex with men (MSM); expanded discussion of the criteria for spinal fluid examination to evaluate for neurosyphilis; the emergence of azithromycin resistant Treponema pallidum; increasing prevalence of quinolone-resistant Neisseria gonorrhoeae in MSM; revised discussion concerning the sexual transmission of hepatitis C; postexposure prophylaxis after sexual assault; and an expanded discussion of STD prevention approaches.

Osteoporosis

Soy Isoflavones Protect Postmenopausal Women From Bone Loss

CONCLUSION: There is a significantly dose-dependent effect of soy isoflavones on attenuating bone loss at the spine and femoral neck possibly via the inhibition of bone resorption in non-obese postmenopausal Chinese women with high Kuppermann Scale.

Ye YB, et al Soy isoflavones attenuate bone loss in early postmenopausal Chinese women : A single-blind randomized, placebo-controlled trial. Eur J Nutr. 2006 Jun 8

Primary Care Discussion Forum

September 1, 2006: Palliative Medicine's Role in the Continuity of Care

Moderator: Tim Domer, M.D.

- Management of acute vs chronic pain
- Quality of Life in chronic illness
- The meaning of "Code Status"
- Preparing for a "Good Death"
- End-of-Life Care as part of Continuity of Care and Prevention

www.ihs.gov/MedicalPrograms/MCH/F/PCdiscForum.cfm#

(uterine rupture, continued from page 1)

tion. The odds ratio of rupture, in comparison to the women who labored spontaneously, was 2.42 for augmentation of labor and 2.86 for induction of labor with the highest risk associated with prostaglandins and oxytocin used in combination (O.R. 3.95). Misoprostol was one of the prostaglandins used in this study. Interestingly, there were no cases of rupture in women induced only with prostaglandins, which they suggest is due to these women going into labor "easily".

The new Committee Opinion also cites another large retrospective study (Macones) of 25,005 women conducted by medical record data abstraction at both tertiary and community hospitals. This study found an overall risk of rupture of 0.98% (0.4% in women who also had a prior vaginal delivery). The odds ratio of uterine rupture was 3 times higher in women who underwent induction or augmentation of labor, in comparison to those who labored spontaneously. However when specific methods were assessed in multivariate analysis, in comparison to spontaneous labor, the odds of uterine rupture was 1.61 with augmented labor, 0.85 induced without oxytocin or prostaglandin, 1.46 with oxytocin alone, 1.90 with prostaglandin alone, and 4.54 with oxytocin and prostaglandins used in combination. Only the increased odds of rupture associated with combined oxytocin and prostaglandin use was statistically significant. Misoprostol was not used in this study population.

Based on this information, the Committee Opinion concludes:

Induction of labor remains a reasonable option, but the potentially increased risk of uterine rupture associated with any induction should be discussed with the patient and documented in the medical record. Selecting women most likely to give birth vaginally and avoiding sequential use of prostaglandins and oxytocin appear to offer the lowest risks of uterine rupture. Misoprostol should not be used in patients who have had cesarean deliveries or major uterine surgery.

This committee opinion is firm in its recommendation to avoid the use of Misoprostol but supports the use of oxytocin augmentation and induction in selected patients with appropriate counseling and does not mandate the avoidance of all prostaglandins. As the most recent (2004) ACOG Practice Bulletin on VBAC cautions against the use of any prostaglandins in women undergoing a trial of labor, widespread use of prostaglandins is not likely without further clarification from ACOG. Nonetheless, this additional information about the risks associated with augmentation and induction of labor will be helpful in counseling patients and the data suggests that the overall increase in risk associated with augmentation and induction of labor is less than previously stated.

Two Prior Cesarean Deliveries

The two recent large studies of VBAC also offer new data about the advisability of VBAC for woman with two prior cesarean deliveries who desire a trial of labor. ACOG addressed this situation briefly but emphatically in the 2004 Practice Bulletin. That recommendation was based primarily on a study by Caughey et al. which was a retrospective chart review of all patients undergoing a trial of labor at a single facility over a twelve year period. The 3757 women with a single prior scar experienced a rupture rate of 0.8% while 3.7% of women with two prior scars experienced uterine rupture (5 of 134). They note that the risk of uterine rupture was nearly 5 times greater for women with two previous scars compared to one scar. In a multivariate regression analysis they also note that the risk was of rupture with 2 scars was only one-fourth as great if the woman had also had a prior vaginal delivery. ACOG concluded that for women with 2 prior cesarean deliveries, only those with a prior vaginal delivery should be considered candidates for a trial of labor.

Macones et al. have reviewed their retrospective data from both tertiary and community hospitals which included 20,175 women with one previous cesarean delivery and 3,970 women with two previous cesarean deliveries. The rates of successful VBAC were similar (75.5% and 74.6% respectively). The risk of rupture was lower for women with one prior cesarean delivery (0.9% vs. 1.8% for the women with two prior cesarean deliveries). The history of a prior vaginal birth was associated with a lower risk of rupture (0.5% vs. 2.4% with no prior vaginal delivery history). The odds ratio of major morbidity was 2.26 for women with 2 prior cesarean deliveries who elected a trial of labor compared to a repeat cesarean delivery. As the absolute risk of major morbidity remains small, these investigators conclude that a VBAC attempt remains a reasonable option for women with 2 prior cesarean deliveries.

Landon et al. have also analyzed the data from their study to address this issue. Their prospective observational study found rates of uterine rupture of 0.7% (115 of 16,915 women with a single prior cesarean delivery) vs. 0.9% (9 of 975 women with a history of more than one prior cesarean delivery) for women undergoing a trial of labor. The VBAC success rate was 74% for those with one prior scar and 67% with two prior scars. (The study also included 84 women with 3 prior scars and 20 women with 4 prior scars; these women experienced a 63% and 55% success rate respectively.) The difference in the absolute rates of uterine rupture for the subset of women with multiple prior scars who had experienced a previous vaginal delivery (1%) and who had not had a previous vaginal delivery (0.85%) was not statistically significant. Prior vaginal delivery was protective in the overall analysis with an odds ratio of uterine rupture of 0.5 compared to those women who had not given birth vaginally in the past. The odds of major maternal morbidity associated with a trial of labor for women with multiple prior cesarean deliveries was 1.41.

Both studies demonstrate that the absolute risk of uterine rupture for women with a history of two prior cesarean deliveries is small. This information suggests that, with appropriate

counseling and labor management, women with two prior cesarean deliveries and are otherwise acceptable VBAC candidates may be allowed to proceed with a trial of labor. An absolute requirement for a prior vaginal delivery is not supported by these findings, although prior vaginal delivery is an additional predictor for success.

Resources for VBAC

All Navajo Area facilities with full-scope Ob/Gyn services continue to offer VBAC, as do a number of other I.H.S. sites. For more information about strategies to optimize safety for women undergoing a trial of labor, the work of the Northern New England Perinatal Quality Improvement Network remains an excellent reference. NNEPQIN has put forth guidelines for risk stratification and resource development on their web site. These guidelines classify as low risk women with one prior uterine scar presenting with spontaneous labor and without FHR abnormalities. Medium risk women are those undergoing induction or augmentation, with 2 or more previous scars, or with a <18 month inter-delivery interval. High risk women are defined as those with repetitive non-reassuring FHR abnormalities, bleeding suggestive of abruption, or 2 hours without cervical change in active labor despite adequate contractions. They then describe appropriate resources needed to manage each risk group. The NNEPQIN site also has model consent forms and patient information as well as suggestions about conducting drills. Dr. Lauria, one of the leaders of the ACOG-award winning NNEPQIN VBAC project, will be returning to speak at the triennial I.H.S. Ob/Gyn meeting in Albuquerque in August 2007.

From Jean Howe, Chinle

OB/GYN CCC Editorial

The VBAC pendulum is beginning to swing back toward a more reasonable approach.

Clearly the national benchmark recommendations that women with 2 previous cesarean deliveries and no vaginal delivery should have a repeat cesarean delivery should be reexamined in light of this new information.

Likewise, cervical ripening and induction of labor with oxytocin and foley bulbs can be considered as the data suggests that the overall increase in risk associated with augmentation and induction of labor is less than previously stated.

In addition, as we counsel our patients we should not just speak in terms of odds ratios or relative risks, but in terms of attributable risk or marginal risks—above the baseline risk. For instance, the Network data in the Landon study demonstrated that the rate of hypoxic ischemic encephalopathy was actually quite small at approximately 1/2,000 trials of labor.

I encourage you to take advantage of unique opportunity available to staff who provide care for Indian Health women and children. One of the foremost experts on this issue and how implement reality obstetric based drills, Dr. Lauria, will be one of the Key Note Speakers at the next National Women's Health and MCH Meeting August 15-17, 2007. There will also be presentations on successful implementation of emergency obstetric drills from the staff of Phoenix Indian Medical Center.

Special thanks to Jean Howe from Chinle for this month's Abstract(s) of the Month.

References: Online

Pessaries Helpful in Pelvic Organ Prolapse Patients

CONCLUSION: A vaginal pessary is an effective and simple method of alleviating symptoms of pelvic organ prolapse and associated pelvic floor dysfunction. Failure to retain the pessary is associated with increasing parity and previous hysterectomy. LEVEL OF EVIDENCE: II-3.

Fernando RJ, et al Effect of vaginal pessaries on symptoms associated with pelvic organ prolapse. Obstet Gynecol. 2006 Jul;108(1):93-9

SAVE THE DATES

IHS/ACOG Obstetric, Neonatal, and Gynecologic Care Course

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

Second Annual AI/AN Long Term Care Conference

- September 18 & 19, 2006
- Tulsa, OK
- www.aianlongtermcare.org
- Contact Alvin Rafaelito at Alvin@nicoa.org, 505-292-2001
- Honoring Our Elders: Best Practices in Long Term Care 2006

Best Practices and GPRA Tracking

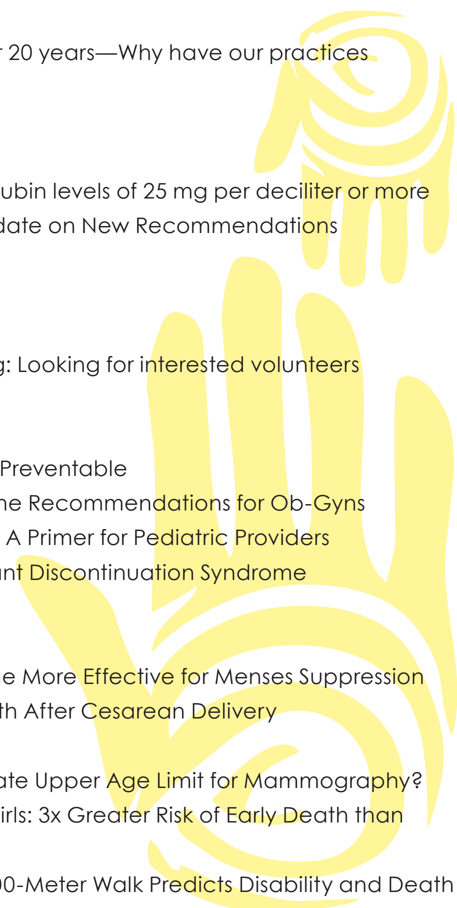
- Nov 1–2, 2006
- Sacramento, CA
- California IHS Area Office, Contact Elaine. brinn@ihs.gov
- www.ihs.gov/MedicalPrograms/MCH/F/documents/BestPracticesFlyer1.pdf

Twenty-second Annual Midwinter Indian Health OB/PEDS Conference

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

Second 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



Abstract of the Month

- Rate of uterine rupture hasn't changed for 20 years—Why have our practices changed?

IHS Child Health Notes

- Outcomes: Newborns with total serum bilirubin levels of 25 mg per deciliter or more
- Infectious Disease Updates—Vaccine: Update on New Recommendations

From Your Colleagues:

- Carolyn Aoyama, HQE
- New Women's Health Work Group Forming: Looking for interested volunteers

Hot Topics

- Obstetrics—Most Stillbirths Worldwide Are Preventable
- Gynecology—ACOG Releases HPV Vaccine Recommendations for Ob-Gyns
- Child Health—Emergency Contraception: A Primer for Pediatric Providers
- Chronic disease and Illness—Antidepressant Discontinuation Syndrome

Features

- American Family Physician—Norethindrone More Effective for Menses Suppression
- ACOG—Induction of Labor for Vaginal Birth After Cesarean Delivery
- Breastfeeding—Early Milk Supply Issues
- Elder Care News—Is 75 Years an Appropriate Upper Age Limit for Mammography?
- Alaska State Diabetes Program—Obese Girls: 3x Greater Risk of Early Death than Non-obese Counterparts
- Elder Care—Performance by Elderly on 400-Meter Walk Predicts Disability and Death
- International Health Update
- Nurses Corner—Native Alaskan and American Indian Nurses Scholarship Opportunity
- Oklahoma Perspective—The indications for IUD use have vastly expanded
- Perinatology Picks—Glyburide flows from fetus to mother by placental transport system
- STD Corner—Condom Use and the Risk of Genital HPV Infection in Young Women

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