OB/GYN & PEDIATRICS
CCC CORNER
Maternal Child Health for American Indians & Alaska Natives

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Routine screening for protein and glucose at each prenatal should be abandoned

OBJECTIVE: More than 22 million prenatal visits occur in the US each year. Each pregnant woman averages 7 visits. Most include urine testing for glucose and protein to screen for gestational diabetes and preeclampsia. Is there sufficient scientific evidence to support this routine practice?

METHODS: We searched Medline (1966-2004), the Cochrane review, AHRQ National Guideline Clearinghouse, the Institute for Clinical Systems Improvement, and Google, searching for studies on proteinuria or glycosuria in pregnancy. The reference list of each article reviewed was examined for additional studies, but none were identified. We found 6 studies investigating glycosuria as a predictor for gestational diabetes mellitus, or proteinuria as a predictor for preeclampsia (1 examined both). Because every study used different dipstick methods of determining results, or definitions of abnormal, each was evaluated separately.

RESULTS: Glycosuria is found at some point in about 50% of pregnant women; it is believed to be due to an increased glomerular filtration rate. The renal threshold for glucose is highly variable and may lead to a positive test result for glycosuria despite normal blood sugar. High intake of ascorbic acid or high urinary ketone levels may result in false-positive results. Four published studies assessed the value of glycosuria as a screen for gestational diabetes. All used urine dipsticks. Three of the 4 most likely overestimate the sensitivity of glycosuria for predicting gestational diabetes.

CONCLUSIONS: Routine dipstick screening for protein and glucose at each prenatal visit should be abandoned. Women who are known or perceived to be at high risk for gestational diabetes or preeclampsia should continue to be monitored closely at the discretion of their clinician.

Alto WA No need for glycosuria/ proteinuria screen in pregnant women. J Fam Pract. 2005 Nov;54(11):978-83.

OB/GYN CCC Editorial

Routine screening at each prenatal visit should be abandoned.

Routine urine screening is both insensitive and non-specific in screening for pre-eclampsia, diabetes, and asymptomatic UTI. Routine prenatal urine is a needless drain on clinic resources and is not a value added procedure.

ACOG does not recommend routine urine dipstick screening because it is not "reliable and cost-effective" (ACOG Practice Bulletin No. 33)

Are there effective methods for identifying women at risk for preeclampsia?

No single screening test for preeclampsia has been found to be reliable and cost-effective. Uric acid is one of the most commonly used tests but it has a positive predictive value of only 33% and has not proved useful in predicting preeclampsia. Doppler velocimetry of the uterine arteries was reported not to be a useful test for screening pregnant women at low risk for preeclampsia.

(continued on page 15)

THIS MONTH

Also on-line....

This publication 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
You are welcome to subscribe to the listserv and receive reminders about this service. If you have any questions, please contact me at nmurphy@scf.cc.

I am looking forward to hearing from you.

Neil J. Murphy

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

IHS Child Health Notes

December 2005

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

"The thing that impresses me the most about America is the way parents obey their children"
—The Duke of Windsor

Articles of Interest

Antibiotic treatment of children with sore throat.
JAMA. 2005 Nov 9;294(18):2315-22.

Antibiotic prescribing in general practice and hospital admissions for peritonsillar abscess, mastoiditis, and rheumatic fever in children: time trend analysis.
BMJ. 2005 Aug 6;331(7512):328-9. Epub 2005 Jun 20.
http://bmj.bmjjournals.com/cgi/content/full/331/7512/328

Summary

In children with sore throat 15-36% have pharyngitis caused by group A B-hemolytic strep (GABHS). This national survey showed that antibiotics were prescribed in 53% of sore throat encounters, in excess of the maximum expected prevalence of GABHS. Performance of a rapid test for GABHS occurred in only about half of the visits but when performed was associated with a lower prescribing rate for diagnoses associated with pharyngitis. It was also noted that inappropriate antibiotics (broad spectrum macrolides and second generation cephalosporins) were prescribed in almost 30% of cases.

The second article describes the potential downside of decreased antibiotic use. The United Kingdom made a concerted effort to decrease overuse of antibiotics by general practitioners and from 1993 to 1999 the prescription of antibiotics fell 34%. The authors report a slight, but measurable increase in mastoiditis in children < 4 years during the time in which antibiotic prescriptions declined. They estimate that 2,500 children with otitis media would have to be treated to prevent one case of mastoiditis.

Editorial Comment

It is clear that indiscriminate antibiotic use leads to increased antimicrobial resistance. It is less clear that a zeal to reduce antibiotic use could lead to a rare, but measurable, increase in serious bacterial infections. The first article suggests that physicians in the United States continue to over prescribe antibiotics for sore throat in children. A simple step would be to adhere to published guidelines: perform a rapid GABHS and treat only those patients who test positive. The second article hints that British restraint in antibiotic use may have rare, but serious consequences. Each physician will have to balance these competing goals in his/her practice.

I would also recommend the British article as it is a master of brevity – only 3 pages including graphs. If only more writers could emulate their style.

Infectious Disease Updates.

Rosalyn Singleton MD MPH

Pneumococcal Disease in children: Will serotype replacement erase the gains from PCV7?

Since introduction of pneumococcal conjugate vaccine (PCV7), reports have shown significant decreases in both invasive pneumococcal disease (IPD) and antimicrobial resistant IPD in children < 2 years as well among persons from older age groups (presumably from decreased transmission). The December edition of Vaccine highlights Alaska's experience through 2003.1 After vaccine introduction, vaccine-type IPD rates declined by 91% in Alaska Native children < 2 years old, and by 40% in adults. There was also a decline in IPD with decreased susceptibility to penicillin, erythromycin, or Septra. The one black cloud in this bright story is a recent increase in the rate of non-vaccine serotype IPD in Alaska Natives leading to an increase in overall IPD from 37% (2001-3) to 59% (2004-5) of pre-vaccine levels. Surveillance among Navajo/Apache children has not shown an increase in non-vaccine type IPD. Since 20-35% of IPD was non-vaccine type before vaccine, the decrease in overall IPD (60-70%) since PCV72 has not been as dramatic as Hib. However, PCV7 has been effective in preventing vaccine type IPD and we should optimize its use. The dilemma is whether an increase in non-vaccine type IPD will begin to erase the gains made against IPD through PCV7 use. Continued surveillance in Alaska and Navajo/Apache is critical to determine if these increases will persist or be seen in other areas. If so, we anticipate new pneumococcal conjugate vaccines with expanded serotype coverage (eg. 9-valent), or vaccines based on antigens common to all pneumococci.

1. Hennessy TW et al. Impact of heptavalent pneumococcal conjugate vaccine on invasive disease, antimicrobial resistance and colonization in Alaska Natives: progress towards elimination of a health disparity. Vaccine 2005; 23:5464-5473.

2. Whitney CG et al. Decline in Invasive pneumococcal disease after the introduction of protein-polysaccharide conjugate vaccine. N Engl J Med 2003;348:1737-46.

Recent literature on American Indian/ Alaskan Native Health

Doug Esposito, MD

Restraint use among northwest American Indian children traveling in motor vehicles.
Am J Public Health. 2005;95(11):1982-8.

Editorial Comment

You guessed it! Northwest American Indian children are inadequately restrained, and the reasons appear to be multiple. In this survey, 41% of children eligible to be in a safety seat were completely unrestrained, while rates for inadequate or improper restraint use were also unacceptably high (about 30% overall). Of course, AI/AN children bear a disproportionately higher burden of motor vehicle injury and death, at too many times the rate of the general U.S. population. We certainly can, and must, do better!

Passenger safety restraint use for both children and adults in the US has generally risen over time. This study suggests that the same trend is not being enjoyed by northwest American Indians. In fact, this is likely the scenario all across "Indian Country." There exists a critical need for effective intervention. Community based public education campaigns and child restraint laws appear to offer the greatest promise, but providers of medical care to AI/AN children should continue to rigorously address this issue in the clinic setting by way of anticipatory guidance. Every little bit will help, and is well worth the effort!

For suggestions on what works, and a whole host of other extremely interesting and useful resources, please refer to the first link below.

Although somewhat dated and related to unintentional injury in general, the 1999 CONACH Statement "The Prevention of Unintentional Injury Among American Indian and Alaska Native Children: A Subject Review" is still relevant. Other useful links are included.

Additional Reading

Guide to community preventive services: systematic reviews and evidence based recommendations. Centers for Disease Control and Prevention.
http://www.thecommunityguide.org/mvoi/default.htm

The prevention of unintentional injury among American Indian and Alaska Native children: a subject review. Committee on Native American Child Health and Committee on Injury and Poison Prevention. American Academy of Pediatrics. Pediatrics. 1999;104(6):1397-9.

Injury mortality among American Indian and Alaska Native children and youth--United States, 1989-1998. MMWR Morb Mortal Wkly Rep. 2003 Aug 1;52(30):697-701.

Motor vehicle crash fatalities by race/ethnicity in Arizona, 1990-96. Inj Prev. 2003;9(3):251-6.

Pediatric motor vehicle related injuries in the Navajo Nation: the impact of the 1988 child occupant restraint laws. Inj Prev. 2002;8(3):216-20.

Agency for Healthcare Research and Quality. Guide to Clinical Preventive Services. Chapter 57: Counseling to Prevent Motor Vehicle Injuries. Second Edition, 1996. http://www.ahrq.gov/clinic/2ndcps/vehicle.pdf

Article

Is Pacific race a retinopathy of prematurity risk factor? Arch Pediatr Adolesc Med. 2005;159(8):771-3.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=16061786&query_hl=9

Summary

This was a small study from a single medical center of a specialized, though important, condition. The authors suggest that Alaska Native race is a risk factor for threshold ROP. There seem to be parallels with Asian race as well.

Editorial Comment

All limitations aside, this study reinforces the idea that neonates are better off "in the oven" with a healthy full-term gestation. This, obviously, is always the goal, though sometimes unattainable. With regards to retinopathy of prematurity (ROP), longer gestations might in fact be even more important for Asians and Alaska Natives than for other racial groups, with regards to ocular health. All risks of such race-specific research aside (for a detailed discussion, please see the excellent AAP CONACH Policy Statement below; yet another example of reasons to pay your AAP dues!) a heightened awareness of "susceptibility" of Alaska Natives to ROP might translate into greater diligence on the part of providers caring for these groups. We will have to await the results of larger series to see if the conclusions of this study in fact hold true.

Additional Reading

Ethical considerations in research with socially identifiable populations.
Pediatrics. 2004 Jan;113(1 Pt 1):148-51.

Susceptibility to retinopathy of prematurity in Alaskan Natives. J Pediatr Ophthalmol Strabismus. 1994;31(3):192-4.

Announcements from the AAP Indian Health Special Interest Group

Sunnah Kim, MS

Listing of Funding Opportunities

The National Center for Medical Home Initiatives for Children with Special Needs located at the AAP updates a list of funding announcements on a daily basis. The list includes current funding opportunities related to a variety of child and family health issues. This list can be accessed at:
www.medicalhomeinfo.org/grant/funding.html

2006 CATCH Implementation Funds —Call for Proposals

Deadline: January 31, 2006

The Community Access to Child Health (CATCH) Implementation Funds program supports pediatricians in the initial

(IHS Child Health Notes, continued on page 15)

From Your Colleagues

Bonnie Bishop-Stark, ANMC

How do you know when you have a false positive HIV test in pregnancy?

Bonnie asked that question to the ANMC HIV Program Director.

Q. I am requesting your input regarding a prenatal patient who has a positive HIV screen and positive Western blot (weakly positive P55) and a HIV viral load of <75. The first test results were done at 18 weeks and were repeated 23 weeks. We are still waiting on the Western blot repeat but she continues to be HIV screen positive and her viral load continues <75. The patient states her partner has tested negative.

A. Here is an explanation for what we see on Western Blot:

The pattern of antibodies to the different viral protein bands provides useful diagnostic information. Antibodies to the HIV-1 major group specific antigen protein, p24, and its precursor, p55, are the first to appear, but their levels decline during the later course of infection.

There can be cross-reacting alloantibodies from pregnancy. Antibodies to the envelope (Env) precursor protein, gp160, and the final Env proteins, gp120 and gp41, are present throughout the course of disease. Antibodies to the polymerase (Pol) gene products—p31, p51, and p66—are also used.

To diagnose HIV, the Western Blot needs to have a combination of p24 and p31 with gp41 or gp 120/160. So, this is likely a false positive, especially having been unchanged over a one month period with an undetectable viral load. Reassurance and a recheck at the beginning of the 3rd trimester and in 6 months thereafter would be a fine plan.

Resources

H.I.V. Infection in Pregnancy, IHS C.E.U./C.M.E. Module
www.ihs.gov/MedicalPrograms/MCH/M/HV01.cfm

The Indian Health HIV Center of Excellence

The HIV Center of Excellence (HIVCOE) is a clinically based center for HIV care, treatment, research, and intervention.

The center is an Indian Health Service program at the Phoenix Indian Medical Center serving the tribal and IHS facilities in the Area.

www.ihs.gov/MedicalPrograms/aids/index.asp

Myra Tucker, CDC

An invitation to Submit Manuscripts to the Maternal and Child Health Journal

Although research has documented substantial disparities in maternal and infant outcomes between American Indians and Alaskan Natives and the white population in the United States, knowledge is limited regarding contributors to these disparities and, more importantly, public health interventions that can eliminate them. Investigators who have conducted research on these topics are invited to submit manuscripts for consideration for a special, forthcoming supplemental issue of the MCH Journal, titled *Research for MCH Practice in American Indian and Alaskan Native Communities*.

Manuscripts may report epidemiologic studies, research on health services, intervention trials, and program evaluations.

Submissions that are authored or co-authored by American Indians and Alaskan Natives are especially encouraged.

A special Advisory Committee, whose members are listed below, has been convened to assist with review of submissions and the final composition of the supplement.

Melissa Adams will serve as theme editor for the supplement.

Submissions received by March 1, 2006 will have the greatest likelihood of acceptance in this special supplement. Please follow the MCH Journal's instructions for authors and submit manuscripts to the Editorial Manager https://maci.edmgr.com . When submitting a manuscript, include a cover letter stating your request for it to be considered for the supplement.

Prospective authors are encouraged to consult Myra Tucker, associate editor for the supplement, by email or telephone regarding their submissions at mjt2@cdc.gov or 770-488-6267.

Advisory Committee: George Brenneman, J. Chris Carey, Bette Keltner, Everett Rhoades.

Alan Waxman, Albuquerque, Retired CCC OB/GYN

Vaccine prevents cervical cancer, Gardasil: Preliminary results 100% effective

I agree with Dr. Stoler's comments.* There are several points that deserve amplification. The vaccine will guard against HPV 16 and 18, but not the other 13 known oncogenic HPV types. 'Having said that, HPV 16 and 18 account for the majority of cases of CIN 3 and cancer.

Screening with Pap or perhaps HPV will have to continue as a part of women's health maintenance exams to detect dysplasia caused by the other high-risk HPV types. We don't know whether dysplasia will become less common after the vaccine or if the other HPV types might move in to fill the void left by 16 and 18. We also don't know whether screening recommendations will change as a result of the decrease in frequency of HPV 16 and 18.

One of the public health uncertainties is how eagerly child health providers will adopt an HPV immunization protocol - it will be one of the more expensive vaccines, at least in the near future- or whether parents of preadolescent children will go for the vaccine. As a prophylactic vaccine it must be administered before the first encounter with the virus which means before the first sexual encounter. As Stoler says in his comments, we also don't know how long the immunization will last. Currently at least one booster shot is recommended—and that will probably be ➔

➔ need before most young women begin to be sexually active.

The question of young women seeing the vaccine as permission to have sex is a real issue among many of those speaking on behalf of various well organized religious denominations. The fact that some see it as an issue may decrease the acceptance of the vaccine among the parents of children of the appropriate age for administration, around 9-11.

Dr. Stoler stressed the need for education, both to providers and patients. Several groups including the American Society for Colposcopy and Cervical Pathology (ASCCP) and the Digene corp., which markets the HPV test, are developing "Train the Trainers" sessions to educate health care providers about HPV and the vaccine. I suspect in the next year, everyone reading this CCC will have the opportunity to attend an HPV vaccine CME session.

I think the HPV vaccine will be a major contributor to reduction in morbidity and mortality from cervical cancer, but most of the potential for benefit will come in the developing world. The incidence and mortality of cervical cancer in the U.S. is remarkably low thanks to the last 50 years of Pap screening. 60 % of those getting cervical cancer in the U.S. today have not availed themselves of regular Pap tests. It is estimated that only about 5,000 new cases and 1600 deaths per year occur among those who have had a Pap within the prior 5 years. This is a small fraction of the more than 100 million women at risk. In many developing countries, cervical cancer is the leading cause of cancer related death in women. Pap tests are not feasible because of cost and logistics. Other screening options are being looked at.

In summary, if a vaccine could be made available cheaply enough it would do wonders to decrease mortality from this disease.

See November CCC Corner for details

Leslie Randall, Aberdeen

PHN visits, maternal EtoH use, and layers of clothing are important risk factors for SIDS among Northern Plains Indians

CONCLUSIONS: Public health nurse visits, maternal alcohol use during the periconceptional period and first trimester, and layers of clothing are important risk factors for SIDS among Northern Plains Indians. Strengthening public health nurse visiting programs and programs to reduce alcohol consumption among women of childbearing age could potentially reduce the high rate of SIDS.

Iyasu S, Randall LL, et al Risk factors for sudden infant death syndrome among northern plains Indians. JAMA. 2002 Dec 4;288(21):2717-23

Carolyn Aoyama, HQE

Breast cancer in Native American women treated at an urban-based Indian health center

BACKGROUND: Breast cancer incidence and survival varies by race and ethnicity. There are limited data regarding breast cancer in Native American women. METHODS: A retrospective chart review was performed of 139 women diagnosed with breast cancer and treated at Phoenix Indian Medical Center in Phoenix, AZ between January 1, 1982 and December 31, 2003. Data points included tribal affiliation, and quantum (percentage American Indian Heritage) along with patient, tumor, and treatment characteristics.

RESULTS: Most patients (79%) presented initially with physical symptoms. There were no significant differences based on tribal affiliation; however, higher quantum predicted both larger tumor size and more advanced stage at diagnosis. Obesity also significantly correlated with larger tumor size and more advanced stage. Treatment was inadequate in 21%; this was attributed to traditional beliefs, patient refusal, or financial issues.

CONCLUSIONS: When compared to national averages, Native American women presented at a later stage, underutilized screening, and had greater delays to treatment.

Tillman L, et al Breast cancer in Native American women treated at an urban-based indian health referral center 1982-2003. Am J Surg. 2006 Dec;190(6):895-902.

Urinary Incontinence

Familial association stronger than that of vaginal delivery

CONCLUSION: Vaginal birth does not seem to be associated with urinary incontinence in postmenopausal women. Considering the high concordance in continence status between sister pairs, and considering that the majority of parous women are continent, an underlying familial predisposition toward the development of urinary incontinence may be present.
LEVEL OF EVIDENCE: II-2.

Buchsbaum GM, et al Urinary incontinence in nulliparous women and their parous sisters. Obstet Gynecol. 2005 Dec;106(6):1253-8.

Hot Topics

Obstetrics

Paroxetine's pregnancy category changed from C to D FDA MedWatch—Paroxetine HCl, Paxil and generic paroxetine

The FDA has determined that exposure to paroxetine in the first trimester of pregnancy may increase the risk for congenital malformations, particularly cardiac malformations. At the FDA's request, the manufacturer has changed paroxetine's pregnancy category from C to D and added new data and recommendations to the WARNINGS section of paroxetine's prescribing information. FDA is awaiting the final results of the recent studies and accruing additional data related to the use of paroxetine in pregnancy in order to better characterize the risk for congenital malformations associated with paroxetine.

Physicians who are caring for women receiving paroxetine should alert them to the potential risk to the fetus if they plan to become pregnant or are currently in their first trimester of pregnancy. Discontinuing paroxetine therapy should be considered for these patients. Women who are pregnant, or planning a pregnancy, and currently taking paroxetine should consult with their physician about whether to continue taking it. Women should not stop the drug without discussing the best way to do that with their physician.

There are two main levels to approach this::

1) Patient notification phase
2) Patient management phase (cognitive behavioral therapy, other medications)

Please see the online version for complete details.

Do you work with a low HIV prevalence population? Here is a strategy to keep it that way

CONCLUSION: In a low prevalence population, the universal use of Oraquick rapid testing is cost-effective because of the low rate of false-positive results, thus preventing the emotional and economic costs of unnecessary treatment for human immunodeficiency virus to the new mother and her family

Doyle NM, et al Rapid HIV versus enzyme-linked immunosorbent assay screening in a low-risk Mexican American population presenting in labor: a cost-effectiveness analysis. Am J Obstet Gynecol. 2005 Sep;193(3 Pt 2):1280-5.

OB/GYN CCC Editorial

HIV screening is a routine test in pregnancy. It is initially performed in an 'opt out' mode at the first prenatal visit. No additional written consent is necessary, but it a critical 'teachable moment' during which HIV patient education should be delivered. If the patient is unable to obtain HIV screening at that time and presents in labor without screening, then HIV screening should be routinely performed at that time. In selected cases high risk individuals should be re-screened in labor. Depending on the logistics of your facility rapid testing may be the best choice.

Gynecology

Handle abnormal Pap smears differently in adolescents

Despite the high incidence of HPV infection in women less than 21 years of age, only a fraction of HPV positive adolescents develop cytologic abnormalities. Most infections are transient, e. g., 8–18 months. Use ablative techniques sparingly in adolescents. Here are some helpful resources for ACOG and ASCCP.

"Adolescents with ASC who are HPV positive or with LSIL results may be monitored with repeat cytology tests at 6 and 12 months or a single HPV test at 12 months, with colposcopy for a cytology result of ASC or higher-grade abnormality or a positive HPV test result."

Other exceptions for adolescents:

When the results of cervical cytology are reported as atypical squamous cells, how should the patient be treated?

"…The exception to this recommendation for HPV follow-up is the adolescent, for whom the risk of invasive cancer approaches zero and the likelihood of HPV clearance is very high. As an alternative to immediate colposcopy, adolescents with ASC HPV-positive test results may be monitored with cytology tests at 6 and 12 months or with a single HPV test at 12 months, with colposcopy for any abnormal cytology result or positive HPV test result. The recommendation and the rationale are similar for follow-up of LSIL in adolescents…."

When the results of cervical cytology are reported as LSIL or atypical squamous cells cannot exclude HSIL (ASC-H), how should the patient be treated?

"…The risk of CIN 2/3+ at initial colposcopy following an LSIL result is between 15% and 30% in most studies. This level of risk of CIN 2/3+ is similar to results of initial colposcopy associated with an ASC HPV-positive cytology result in other studies (17.8% versus 17.9%) (4, 67). Therefore, colposcopy is recommended for evaluation of LSIL. For adolescents with LSIL results, it may be reasonable to follow up without immediate colposcopy. Low-grade squamous intraepithelial lesions are very common in sexually active adolescents because of the recent onset of sexual activity in this group, but clearance of HPV is high and cancer rates are extremely low. Therefore, follow-up recommendations are similar to those for adolescents with ASC HPV-positive results…."

"When the initial evaluation of an HSIL cytology result is a diagnosis of CIN 1 or less, how should the patient be treated?

Interpretations of HSIL and CIN 2 or CIN 3 are poorly reproducible (6, 78, 89, 90). One study reported that less than half of HSIL results and 77% of CIN 2 or CIN 3 results were confirmed on quality control review. As a consequence, experts have recommended review of the cytology and histology results in cases with HSIL diagnoses and discrepancies in colposcopic ➔

➔ results, although this approach has not been tested in clinical studies. If review is not undertaken or colposcopy results are not satisfactory, excision is recommended. This approach is favored because (as discussed previously) a single colposcopy can miss CIN 2 or CIN 3, particularly small lesions, and because reports have documented CIN 2/3+ when examining excision specimens in up to 35% of women with HSIL cytology results and either negative or noncorrelating (CIN 1) colposcopy results.

Adolescents are exceptions to this recommendation because interobserver variability is most pronounced in younger women, the risk of invasive cancer is extremely low, and the likelihood of spontaneous resolution of CIN 1 or CIN 2 is high. Therefore, follow-up with colposcopy and cytology tests at 4–6 months may be undertaken, as long as the colposcopy results are adequate and the endocervical curettage is negative…."

"How should CIN 2 and CIN 3 be managed?

In contrast to CIN 1, CIN 2 and CIN 3 are recognized potential cancer precursors, although CIN 2 is associated with significant spontaneous regression. Evidence from ALTS suggests that approximately 40% of CIN 2 cases regressed over 2 years, whereas regression of CIN 3, if present, was too rare to measure accurately during the study. Reports of significant regression of CIN 3 generally are based on cytology and not histology or are associated with multiple follow-up biopsies, which influence the natural history of the disease. Even when histology is assessed, only 77% of CIN 2 and CIN 3 diagnoses were verified on quality control review in ALTS, making assertions about regression more difficult to interpret in studies without rigorous pathology review (6). In addition, histologic differentiation between CIN 2 and CIN 3 is not sufficiently reliable to permit clear stratification of risk. As a consequence, immediate treatment of CIN 2 and CIN 3 with excision or ablation in the nonpregnant patient is recommended. The only exception to this recommendation is that follow-up similar to CIN 1 may be considered in the adolescent with CIN 2, whose likelihood of spontaneous clearance is substantial and whose risk of cancer approaches zero. Therefore, care of the adolescent with CIN 2 may be individualized… ."

Management of abnormal cervical cytology and histology. ACOG Practice Bulletin No. 66. American College of Obstetricians and Gynecologists. Obstet Gynecol 2005;106:645–64.

Child Health

Guidelines for Identifying and Referring Persons with Fetal Alcohol Syndrome

This report summarizes the diagnostic guidelines drafted by the scientific working group, provides recommendations for when and how to refer a person suspected of having problems related to prenatal alcohol exposure, and assesses existing practices for creating supportive environments that might prevent long-term adverse consequences associated with FAS. The guidelines were created on the basis of a review of scientific evidence, clinical expertise, and the experiences of families affected by FAS regarding the physical and neuropsychologic features of FAS and the medical, educational, and social services needed by persons with FAS and their families. The guidelines are intended to facilitate early identification of persons affected by prenatal exposure to alcohol so they and their families can receive services that enable them to achieve healthy lives and reach their full potential. This report also includes recommendations to enhance identification of and intervention for women at risk for alcohol-exposed pregnancies.

Two RCTs show promising results with hypothermia for neonatal encephalopathy

Hypoxic ischemic encephalopathy is a rare condition associated with high neonatal mortality and morbidity. Two randomized clinical trials have recently been published showing potentially promising results with hypothermia for neonatal encephalopathy. Additional clinical trials are underway to test cooling as a therapeutic modality for hypoxic ischemic encephalopathy. Outcome information about infants treated with hypothermia is available for children up to approximately 2 years of age. Longer-term outcome (ie, school age information) is currently lacking with respect to benefit and risk. Therapeutic hypothermia offers a potentially promising therapy for hypoxic ischemic encephalopathy. Hypothermia for encephalopathy should be considered an evolving therapy because of lack of long-term safety and efficacy data.

Higgins RD Hypoxic ischemic encephalopathy and hypothermia: a critical look. Obstet Gynecol. 2005 Dec;106(6):1385-7.

Chronic disease and Illness

Stroke preventive treatments are well understood and widely available: Why isn't it used?

Cerebrovascular disease is the third leading cause of mortality and the leading cause of long-term neurological disability in the United States. Most strokes are of ischemic origin and, other than cardioembolic or small vessel strokes, are caused by the development of platelet-fibrin thrombi on an atherosclerotic plaque. This underlying disease mechanism shares important features with coronary artery disease and peripheral artery disease, highlighting the systemic nature of atherothrombosis and the elevated cross risk in stroke patients for ischemic events in other vascular beds. It has been estimated that up to 80% of ischemic strokes could be prevented with application of currently available treatments for blood pressure, cholesterol, and antithrombotic therapies. Stroke is not, like cancer, waiting for a scientific breakthrough; stroke preventive treatments are well understood and widely available. It is only the application of these treatments to patients, many of whom do not visit physicians, that is lacking. Clearly, better education of the public and active participation of primary care physicians is essential to get the message out to all those at risk.

Kirshner HS, et al Long-term therapy to prevent stroke. J Am Board Fam Pract. 2005 Nov-Dec;18(6):528-40.

Features

ACOG

Inappropriate use of the terms fetal distress and birth asphyxia

ABSTRACT: The Committee on Obstetric Practice is concerned about the continued use of the term "fetal distress" as an antepartum or intrapartum diagnosis and the term "birth asphyxia" as a neonatal diagnosis. The Committee reaffirms that the term fetal distress is imprecise and nonspecific. The communication between clinicians caring for the woman and those caring for her neonate is best served by replacing the term fetal distress with "nonreassuring fetal status," followed by a further description of findings (eg, repetitive variable decelerations, fetal tachycardia or bradycardia, late decelerations, or low biophysical profile). Also, the term birth asphyxia is a nonspecific diagnosis and should not be used.

Inappropriate use of the terms fetal distress and birth asphyxia. ACOG Committee Opinion No. 326. American College of Obstetricians and Gynecol-ogists. Obstet Gynecol 2005;106:1469–70.

Midwives Corner

Marsha Tahquechi, GIMC

Liability in Triage: EMTALA Regulations and Common Obstetric Risks

The Emergency Medical Treatment and Active Labor Act (EMTALA) affects all clinicians who provide triage care for pregnant women. EMTALA has specific regulations for hospitals relative to women in active labor. Violations can carry stiff penalties. It is critical for clinicians performing obstetric triage to understand the duties and obligations of this law. This article discusses EMTALA and reviews common liability risks in obstetric triage as well as strategies to modify those risks.

Angelini DJ, Mahlmeister LR. Liability in triage: management of EMTALA regulations and common obstetric risks. J Midwifery Womens Health. 2005 Nov-Dec;50(6):472-8.

Post Partum Hemorrhage is the most common cause of maternal mortality worldwide

This month's midwife corner presents two reviews from the Cochrane data base. One focus is on the use of prophylactic oxytocin for the third stage of labor and the other reviews active vs. expectant management of the third stage of labor. The literature reviewed found that the active management of labor is superior to expectant management. There is included a joint position statement from the International Confederation of Midwives (ICM) and the International Federation of Gynecologists and Obstetricians (FIGO) on active management of the third stage of labor. Another article from the Journal of Midwifery and Women's Health approaches PPH from a global perspective and reviews prevention strategies in low risk settings.

Last, but not least, a Cochrane review on placental drainage as part of the management of the third stage of labor shows that there is potentially some benefit to using this technique.

By the way, what does 'controlled cord traction' mean?

The controlled cord traction used is relatively constant and firm, but not aggressive. It is not necessarily timed to the increasing infrequent post partum contractions, but it often can be applied on q 2-3 minutes basis just to give the patient a break (because many times we ask the patient to give a little push while we are doing it).

Patients allocated to the controlled cord traction group had the third stage of labor managed actively. Oxytocin (10 units) was administered intramuscularly during delivery of the anterior shoulder of the baby. In the case of breech vaginal delivery this was given soon after delivery of the baby. The umbilical cord was clamped and cut immediately after delivery of the baby. As soon as the baby was separated and palpation of the uterus through a sterile abdominal towel confirmed that it was contracting firmly, controlled cord traction was commenced (Brandt-Andrews technique). The lower segment of the uterus was grasped between the thumb and index finger, and steady pressure was exerted in an upward and backward direction. At the same time the other hand, holding the clamp on the cord, at the level of the introitus started steady traction on the cord in a backward and downward direction, exactly countered by the upward pressure of the hand on the uterus, so that the position of the uterus remained unchanged. The traction was gentle at first and then was slowly increased, the placenta usually being delivered quite easily. Controlled cord traction was repeated every 2 to 3 minutes, if the first attempt was unsuccessful. No fundal pressure was applied to the abdomen even if the placenta failed to deliver by the controlled cord traction method.

Khan GQ, et al Controlled cord traction versus minimal intervention techniques in delivery of the placenta: a randomized controlled trial. Am J Obstet Gynecol. 1997 Oct;177(4):770-4

More resources in the online version

MCH Alert

New cigarettes with flavors that appeal to youth

The researchers reviewed internal tobacco industry documents via a Web-based search of collections made publicly available through the 1998 Master Settlement Agreement between the state attorneys general and major U.S. tobacco manufacturers.

- Internally, the appeal of flavored cigarettes has long been associated with specific consumer populations, particularly young smokers and novice smokers.
- The concept of flavored cigarettes as a strategy for expanding the cigarette market has been revisited periodically over many years.
- Product concepts targeting smokers ages 18-24 include aftertaste, tobacco satisfaction, and menthol aftertaste and aroma. The product technologies proposed to address these areas include non-conventional methods.
- Past research on flavor technology is directly linked to the development of today's flavored cigarettes.
- A physical examination of the filter confirmed the placement of a flavor-delivering pellet not visible to the consumer in certain Camel Exotic Blend cigarettes.
- The review identified few internal evaluations of the new product technologies used in today's flavored cigarettes.

"The potential influence of flavored cigarettes initiation might go unrecognized without efforts to increase awareness," state the authors.

They conclude that "coordinated public education and community action are needed to inform youth . . . and confront the tobacco industry, especially in the absence of governmental regulation."

Carpenter CM, Wayne GF, Pauly JL, et al. 2005. New cigarette brands with flavors that appeal to youth: Tobacco marketing strategies. Health Affairs 24(6):1601-1610.

STD Corner

Lori de Ravello, National IHS STD Program

High-Risk HPV Associated with Chlamydia trachomatis with Female Adolescents

Human papillomavirus (HPV) infection is a necessary but not sufficient cause of cervical cancer. While chlamydia infection has been associated with cervical cancer, the meaning of this association remains unclear. The authors' objective was to investigate this association by evaluating whether concurrent genital tract infections are associated with HPV persistence, a precursor to cervical cancer. Interview data and biologic samples for HPV, Chlamydia trachomatis, Neisseria gonorrhoeae, Trichomonas vaginalis, and bacterial vaginosis testing were collected from female adolescents in an Atlanta, Georgia, longitudinal cohort study at 6-month visits (1999-2003). Associations with persistence (detection of the same HPV type at two sequential visits (visit pair)) were assessed among subjects with 2-5 visits and > or =6 months of follow-up. Associations were evaluated by logistic regression using methods for correlated data. Type-specific persistence of high-risk HPV types was detected in 77 of 181 (43%) analyzed visit pairs. Concurrent infection with C. trachomatis was independently associated with persistence of high-risk HPV types (adjusted odds ratio=2.1, 95% confidence interval: 1.0, 4.1). Infection with more than one HPV type at the initial visit was also associated with high-risk persistence (adjusted odds ratio=2.8, 95% confidence interval: 1.6, 4.9). The association between chlamydia infection and cervical cancer may be due to an effect of chlamydia infection on persistence of high-risk HPV.

Samoff E et al Association of Chlamydia trachomatis with persistence of high-risk types of human papillomavirus in a cohort of female adolescents. Am J Epidemiol. 2005 Oct 1;162(7):668-75.

Featured Website

The Indian Health Women's Health pages are getting a facelift and needs input

This site provides resources on access to care, maturity issues, violence against Native women, just to name a few items. Please take a look at this site as we are currently performing a redesign and facelift to let us know what other resources would be helpful and/ or how to make this site more user friendly for Indian Health staff.

www.ihs.gov/MedicalPrograms/MCH/Wh.asp

Contact David Gahn: **David.Gahn@ihs.gov**

Medical Mystery Tour

CC: I feel really cold and my side hurts, plus I am shaking all over

The patient is a 24 year old G2 P1001 who presented to her Community Health Aide (CHA) in a rural Alaskan village complaining of nausea, vomiting, shaking chills, and contractions every 2 minutes.

The patient was 37 3/7 weeks EGA by a 32 week ultrasound. Her prenatal history was significant for 3 total prenatal visits, anemia with hemoglobin 10.2 g/dL, and a previous 10 lb. 2 oz term NSVD. The patient had a glucose challenge test result of 129 mg/dL.

The entry level CHA recorded the temperature to be 99.2 F which was 100.8 F on repeat. The patient was tender in her right flank and abdomen. The fetal heart rate was in the 140s and the patient noted to have a negative urine dipstick, except a trace of protein. The CHA determined the patient had a viral syndrome and preterm contractions. The CHA consulted a provider at a regional hospital by phone. The patient was then treated with prochlorperazine intramuscularly, terbutatline subcutaneously, Tylenol by mouth, and intravenous fluids. A transport was arranged on the next regularly scheduled mail plane.

Upon arrival at the Emergency Department, the patient noted fever and chills, abdominal pain (R>L). The patient's temperature was recorded as 103.6 F, pulse 122–136 bpm, and the FHR was in the 160–210 bpm. Examination revealed right middle quadrant tenderness, suprapubic tenderness, and mid-epigastric tenderness. There was guarding, but no rebound tenderness. The cervix was 1 cm dilated, thick, and – 3 station. The hemoglobin was 6.1 g/dL, and white blood cell count 4,000/microL.

Urinalysis showed specific gravity 1.025, WBC 10–30 hpf, positive leukocyte esterase, bacteria 1+, 3 + ketones, epithethial cells 1–5 hpf, trace protein, nitrite negative, and negative casts.

The patient was admitted with a diagnosis of pyelonephritis and treated with Ceftriaxone 1 gm intravenously.

The next morning the patient noted dysuria, feeling cold with shaking chills, shortness of breath, chest pain, and right sided abdominal pain. Her temperature was 104.0 F, pulse 150 bpm, BP 138/58, and pulse oximetry 99%. The physical examination was otherwise essentially unchanged.

The hemoglobin was 8.6 g/dL, white blood cell count 3,000 cells/microL, and platelet count 267,000/microL. The electrocardiogram revealed a trigeminal rhythm at 138 bpm and LVH by voltage. Arterial blood gases on two liters by nasal prongs revealed pH 7.43, Po2 130, PCO_2 17.8, HCO_3 11.9 meq/L, and base excess –12.

Later that day the laboratory reported a preliminary blood culture result with gram positive cocci in clusters. Gentamicin 140 mg IV and vancomycin 500 mg IV were added to the antibiotic regime.

The patient was subsequently transferred to a tertiary care facility approximately 500 miles away by air ambulance. Upon arrival the patient was afebrile, but had shaking chills. The patient had developed exquisite right flank pain. The physical examination was otherwise essentially unchanged. The cervix was 1 cm dilated, thick, and – 3 station

The referring facility subsequently reported the preliminary positive blood culture as gram negative rods. The patient's gentamicin was changed to 100 mg q 8 hours IV and the vancomycin was stopped. The pyelonephritis patient was suspected of urosepsis. The admission plan included an order for a renal ultrasound in the morning to rule out perinephric abscess.

Five hours after admission the patient's white blood cell count increased to 26,100 cells/microL and the patient continued to have right flank and right lower quadrant pain. The right flank pain now required intermittent intravenous morphine. The General Surgery Service was consulted.

The General Surgery team concurred that the patient had pyelonephritis with a suspected perinephric abscess. They suggested adding vancomycin back to the regimen because of the preliminary positive blood culture at the referring facility had suggested gram positive cocci in clusters and was still unidentified. There was a significant prevalence of methicillin resistant Staphylococcus aureus infection in the patient's home region. The General Surgery Service agreed with obtaining a renal ultrasound in the morning.

Is there anything else would you like to do now for this patient diagnosed with urosepsis at 37 weeks EGA?

More on this story in the January CCC Corner
Questions: nmurphy@scf.cc

Alaska State Diabetes Program

Barbara Stillwater

Type 2 diabetes mortality in women: Same as a "coronary heart disease equivalent" Similar Mortality Risks in Diabetes as Those with Heart Disease

CONCLUSIONS: Diabetes without prior myocardial infarction and prior myocardial infarction without diabetes indicate similar risk for CHD death in men and women. However, diabetes without any prior evidence of CHD (myocardial infarction or angina pectoris or ischemic ECG changes) indicates a higher risk than prior evidence of CHD in nondiabetic subjects, especially in women.

Juutilainen A, et al Type 2 diabetes as a "coronary heart disease equivalent": an 18-year prospective population-based study in Finnish subjects. Diabetes Care. 2005 Dec;28(12):2901-7.

American Family Physician—Cochrane Briefs

Duration of Therapy for Women with Uncomplicated UTI

CLINICAL QUESTION: What is the most appropriate duration of therapy for uncomplicated urinary tract infections (UTIs) in women?

EVIDENCE-BASED ANSWER: Three days of antibiotic therapy is as effective as longer courses for treatment of uncomplicated UTIs in women.

PRACTICE POINTERS: Uncomplicated UTIs in women are one of the most common indications for antibiotics. To prevent resistance, antibiotics should be used judiciously; thus, it is important to determine the minimum duration of antibiotic therapy required for treatment to be effective.

Milo and colleagues reviewed 32 randomized controlled trials (with a total of 9,605 patients) comparing three days of oral antibiotic therapy with longer courses for women 18 to 65 years of age. Pregnant women and women with symptoms that suggest upper UTI (e.g., fever, flank pain, vomiting, positive blood cultures) were excluded.

For short- and long-term resolution of symptoms, the reviewers found no difference between a three-day antibiotic course and a course lasting five to 10 days. Longer courses were more effective at clearing the bacteria on follow-up culture but also caused more adverse effects, and it is not clear that bacterial clearance results in improved patient-oriented outcomes. Although data were limited, organisms cultured were not more likely to be resistant to antibiotics after treatment in either group. For most women, a three-day course of antibiotics is sufficient to treat symptoms.

The Institute for Clinical Systems Improvement (ICSI) guideline recommends treatment with double-strength trimethoprim/sulfamethoxazole (Bactrim DS, Septra DS), one tablet twice per day for three days; or trimethoprim (Proloprim) at a dosage of 100 mg twice per day for three days. For women who are allergic to these first-line medications, the ICSI guideline1 recommends ciprofloxacin (Cipro) at a dosage of 250 mg twice per day for three days, or nitrofurantoin (Macrobid) at a dosage of 100 mg twice per day for seven days. Telephone screening and prescription of treatment is appropriate if there are no complicating factors. In the office, urinalysis is adequate for evaluating symptoms.

Institute for Clinical Systems Improvement. Uncomplicated urinary tract infection in women. Bloomington, Minn.: Institute for Clinical Systems Improvement, 2004.

Milo G, et al. Duration of antibacterial treatment for uncomplicated urinary tract infection in women. Cochrane Database Syst Rev 2005;(2): CD004682

Menopause Management

WHI clinical trial revisit: imprecise methodology disqualifies the study's outcomes

We analyzed The Women's Health Initiative (WHI) Study because it had a significant impact on clinical practice, both nationally and internationally. However, despite the widespread public and professional awareness of the results, an independent, nonbiased analysis of the quality of the methodology of the study has not been available. We find the study design and its execution question the validity of the results, making it difficult to apply the WHI results to healthy postmenopausal women, different ethnic groups, or as general postmenopausal prevention.

Ostrzenski A, Ostrzenska KM WHI clinical trial revisit: imprecise scientific methodology disqualifies the study's outcomes. Am J Obstet Gynecol. 2005 Nov;193(5):1599-604; discussion 1605-6.

Jenny Glifort, ANMC

Motherhood a "rite of passage" for some teens

This longitudinal, interpretive study explored how teen mothers experienced the self and future during a 12-year period. Sixteen families were first interviewed intensively in 1988-1989 once the teen's infant reached age 8 to 10 months; they were re-interviewed in 1993, 1997, and 2001 (Time 4). Twenty-seven family members were re=interviewed at Time 4. The metaphor of a narrative spine is used to describe how the mothers' lives unfolded during the 12-year period. The narrative spines of some mothers were large and supported well-developed, coherent "chapters" on mothering, adult love, and work. For others, mothering provided a "backbone" for a meaningful life; however, chapters on adult love and work were less fully developed. The lives of a third group of mothers lacked a coherent narrative structure. Each pattern is presented with a paradigm case.

Smithbattle L, Teenage mothers at age 30. West J Nurs Res. 2005 Nov;27(7):831-50.

MCH Alert

Upcoming Theme: Health Care Systems —The Key to Complete Women's Health Care

As we are unfolding the new women's health package, DM best practices around GDM and breastfeeding in Diabetics, there are complementary health considerations that impact on women's health and inter-conception care.
Judith.Thierry@ihs.gov

Here is one example of a facility's comprehensive approach to Women's Health:

At Chinle the Women's Health Coordinator's position was modified from the original position created in 1998 to encompass an added clinical role of a CNM or NP. It was determined that a person in the role who was part of medical staff would have more "clout."

- I am the Women's Health Program Coordinator since April of 2002.
- I supervise a Registered Nurse High Risk OB Case manager, who works closely with the OB/GYNs to manage all the patients whose pregnancies are complicated by factors placing them in a higher risk category: DM especially.
- Three staff of the Breast and Cervical Cancer Prevention Program, the Case Manager, the Data Entry Clerk and the Health Educator. This Program is CDC Funded through the Navajo Nation Division of Health. We work with them through MOU.
- All Breast Imaging, pathology and cytology reports, as well as all Pap smear, Colposcopy, Cryo, LEEP and endometrial Biopsy Reports are maintained by WH Staff through the Women's Health Package.
- I am on site liaison (supervisor) for Navajo family Health Resource Network Family Planning counselors.
- I supervise the Women's Health Program Assistant, (secretarial, administrative, and assistant case management work for the Breast Clinic case load)
- My programs work closely with the newly created surgical case management position (training that person to case manage the Breast Clinic patients), radiology (for breast imaging), scheduling breast clinic appointments, off site diagnostic procedures for abnormal breast exams (clinical or imaging); medical and radio logic oncology.
- As the Women's Health Coordinator I established the Chinle Breast Cinic in 2002 with Women's Health Staff and a surgeon. As WHC I created the case management model for the Breast Clinic in 2002/2003. The Breast Clinic is now managed by the Surgeons and the Surgical Case Manager with the assistance of and coordination with Women's Health Program staff and the Mammography Tech.
- I lead the work of and Chair the Chinle Interpersonal Violence Prevention Committee. Chinle is one of the fifteen DV Demonstration Pilot Project Sites of the IHS/ACF Grant. This is largely, coordination, staff training, policy creation and revision.
- I am active in the GPRA Committee of Chinle Hospital, responsible for the DV indicator and share responsibility for the other WH Indicators, Pap, Mammogram, FAS and HIV screening.
- I Co-Chaired the STD Task Force formed in 2002 in response to the Syphilis epidemic. However, we are now considering reincorporating this work into the Infectious Disease/ Preventative Medicine office and disbanding the STD Task Force.
- I started a weekly evening clinic for WH (OB and GYN) in October of 2002. I also see the walk in patients Monday and Wednesday mornings. However, we have modified our scheduling capabilities with same day and two day urgent appointments. The numbers of "walk ins" has diminished.
- I have not done inpatient since 1/2002. I miss it but am otherwise busy.

Hope this is helpful.
Yohanah B. Leiva, CNM, MS
Women's Health Program Coordinator
Chinle IHS
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Perinatology Picks

George Gilson, MFM, ANMC

Meconium Happens

BACKGROUND: It is uncertain whether amnioinfusion (infusion of saline into the amniotic cavity) in women who have thick meconium staining of the amniotic fluid reduces the risk of perinatal death, moderate or severe meconium aspiration syndrome, or both.

METHODS: We performed a multicenter trial in which 1998 pregnant women in labor at 36 or more weeks of gestation who had thick meconium staining of the amniotic fluid were stratified according to the presence or absence of variable decelerations in fetal heart rate and then randomly assigned to amnioinfusion or to standard care. The composite primary outcome measure was perinatal death, moderate or severe meconium aspiration syndrome, or both.

RESULTS: Perinatal death, moderate or severe meconium aspiration syndrome, or both occurred in 44 infants (4.5 percent) of women in the amnioinfusion group and 35 infants (3.5 percent) of women in the control group (relative risk, 1.26; 95 percent confidence interval, 0.82 to 1.95). Five perinatal deaths occurred in the amnioinfusion group and five in the control group. The rate of cesarean delivery was 31.8 percent in the amnioinfusion group and 29.0 percent in the control group (relative risk, 1.10; 95 percent confidence interval, 0.96 to 1.25).

CONCLUSIONS: For women in labor who have thick meconium staining of the amniotic fluid, amnioinfusion did not reduce the risk of moderate or severe meconium aspiration syndrome, perinatal death, or other major maternal or neonatal disorders.

Fraser WD, et al, Amnioinfusion for the prevention of the meconium aspiration syndrome. NEJM 2005; 353:909-17.

Comment: George Gilson, MFM

Meconium happens in about 12% of all births, and in over 30% of post term births. The meconium aspiration syndrome (MAS) occurs in 1/2000 births, and in up to 8% of post term births. Meconium is found below the cords in almost half of births through meconium stained fluid, but only a small proportion of infants with "mec" below the cords will develop MAS. Pharyngeal suctioning and endotracheal intubation and suctioning have not been shown to reduce the risk of MAS. A 2002 Cochrane Review found that amnioinfusion was associated with an overall reduction in the incidence of MAS (RR=0.44, CI 0.25–0.78), but the current study challenges this.

Fraser et al carried out a multicenter randomized controlled trial of 1,998 women at term with thick meconium into treatment with amnioinfusion, or standard labor care without amnioinfusion. The study groups were further stratified into cases with and without recurrent severe variable decelerations of the fetal heart rate. Women in the amnioinfusion arm had a rate of MAS of 4.4%, a neonatal death rate of 0.5%, and a cesarean delivery rate of 32%. Women in the control group had corresponding rates of 3.1%, 0.5%, and 29%, none of which were significantly different. There was likewise no significant effect of amnioinfusion in the subgroup with variable decelerations, however the study was underpowered for this occurrence. Modalities used for neonatal suctioning and resuscitation were likewise not significantly different between the groups.

… only a small proportion of infants with "mec" below the cords will develop MAS.

This large RCT most likely trumps the previous meta-analyses. There are probably several reasons why amnioinfusion did not effect the anticipated result. MAS is not correlated with FHR decelerations, low pH, 5 minute Apgar score, or other markers of acute hypoxia. It is correlated with oligohydramnios, elevated cord blood erythropoietin, and muscularization of the pulmonary arteries at autopsy, all markers of chronic hypoxia. Most infants in whom the syndrome develops have meconium in the tracheobronchial tree before labor. As their chronic hypoxia worsens and their pCO_2 rises, they probably involuntarily defecate and then gasp, aspirating meconium deep into their lower respiratory tract before any intervention could have been helpful. Since most MAS occurs in post term infants, preventing the occurrence of postmaturity by inducing labor at 41 weeks is the intervention most likely to be of benefit in preventing deaths secondary to meconium aspiration.

We'll have to wait to see how our professional organizations respond to this important paper before we abandon amnioinfusion altogether, and hopefully we'll see some confirmatory studies as well, so please stay tuned….

Primary Care Discussion Forum

Cardiology Topics for Primary Care Providers

February 15, 2006
Moderator:
Jim Galloway, MD
Director, Native American Cardiology Program

Here are some of the topics to be discussed

- Role of CRP in cardiac evaluation
- Should we all take statins? or get out of our chairs, work out, lose weight, diet and get fitness religion?
- Lipid screening guidelines in non-smoking non-diabetic Native Americans
- Newer cardiac imaging techniques (MRI, CT angio) over traditional catheterization procedures.

How to subscribe/ unsubscribe to the Primary Care Discussion Forum? Subscribe to the Primary Care listserv
www.ihs.gov/cio/listserver/index.cfm?module=list&option=list&num=46&startrow=51

Navajo News

Jean Howe, Chinle

MRSA presents new challenges in treating skin and soft-tissue infections, including in pregnancy....

MRSA (Methicillin-Resistant Staphylococcus aureus) spread in healthcare settings has been a grave concern for several years and is evidence of our dwindling antibiotic armamentarium. More recently, community-acquired MRSA infections have also become relatively common and may require consideration of alternative antibiotic regimens in some situations. Over the past three months our rural health care facility has noted a series of cases of MRSA soft tissue infections in pregnant and postpartum patients, most of which were more likely to have been community acquired than nosocomial.

... community-acquired MRSA infections have also become relatively common

The article by Laibl, et al in the September Obstetrics and Gynecology suggests that this experience may soon be rather commonplace. The authors conducted a chart review of pregnant patients diagnosed with MRSA between 1/1/00 and 7/30/04 at Parkland Hospital in Dallas, Texas. They noted 2 cases in 2000, 4 in '01, 11 in '02, 23 in '03, and 17 through 7/04. 96% of cases were skin and soft tissue infections with 44% involving extremities, 25% buttocks, and 23% breast/ mastitis. Multiple sites were often involved. 18% of cases were diagnosed in the postpartum period. All isolates were sensitive to trimethoprim-sulfamethoxazole, vancomycin, and rifampin. 98% gentamicin sensitivity and 84% levofloxacin sensitivity were also noted. They conclude that recurrent skin abscesses in pregnancy should prompt an investigation for MRSA.

Another article in the March Annals of Emergency Medicine described a prospective observational study of a high-risk (non-pregnant) population presenting to an urban E.R. While their findings that 51% of skin abscesses were MRSA-colonized may not be generalizable to other populations, it again raises interesting questions about antibiotic choices. They found MRSA sensitivities to trimethoprim-sulfamethoxazole (100%), clindamycin (94%), tetracycline (86%), and levofloxacin (57%). This article and the accompanying editorial suggest that a trimethoprim-sulfamethoxazole-based regimen may be appropriate for skin abscesses in some populations but also raise concern that Streptococcus pyogenes not be overlooked as another potential virulent pathogen and recommend that cellulitis without abscess treatment include cephalexin or another antibiotic known to be effective against S pyogenes. Treatment of abscesses with I&D alone may be sufficient regardless of pathogen but they also suggest a role for culture, both to guide further treatment if required and to monitor shifts prevalence of MRSA in the community.

Laibl VR, Sheffield JS, Roberts, S, et al. Clinical Presentation of Community-Acquired Methicillin-Resistant Staphylococcus aureus in Pregnancy. Obstetrics & Gynecology;106:461-465.

Other MRSA related easily available online

(IHS Child Health Notes, continued from page 3)

and/or pilot stage of developing and implementing a community-based child health initiative. Grants of up to $10,000 are awarded each year on a competitive basis to pediatricians who want to initiate and develop a pilot project that addresses the local needs of children in the community. Pediatricians and pediatric residents are eligible to apply.

In addition, CATCH is pleased to announce a specific funding opportunity within this 2006 Implementation Funds cycle. CATCH will also be offering Early Childhood Obesity grants for pediatricians who wish to focus their interventions on obesity prevention in children from birth to 8 years old. More information will be provided in the Call For Proposals for CATCH Implementation Grants. Click here for more information.

Locum Tenens and Pediatric 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

(Routine Screening…, continued from page 1)

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

Practitioners should be aware that although various laboratory tests may be useful in the management of women with preeclampsia, to date there is no reliable predictive test for preeclampsia.

Screening for Pre-clampsia

- Screening for preeclampsia is recommended for all pregnant women at the first prenatal visit and throughout the remainder of pregnancy.
- To screen for preeclampsia, measure an upright sitting blood pressure after a 10 minute rest. The BP should be repeated in a similar manner 4–6 hours later to confirm the diagnosis.

Gestational diabetes

Although measuring urine glucose may be much easier than measuring blood glucose, it has potential errors that limit its accuracy as a reflection of glycemic control and is rarely used. Detection of glucose on a semi-quantitative urine dipstick (anything regarded as trace positive or more) or Clinitest tablets is a fairly specific but insensitive means of screening for type 2 diabetes. The high rate of false-negative results suggests that the urine dipstick is not adequate as a screening test.

Asymptomatic urine infections

Screening for asymptomatic bacteriuria is standard practice at the first prenatal visit. Re-screening is generally not performed in low risk women, but can be considered in women at high risk for infection (e.g., presence of urinary tract anomalies, hemoglobin S, or preterm labor).

What should you perform urinalysis in pregnancy for?

It is reasonable to perform prenatal urine testing in these cases:

- BP greater then 140/90 mm Hg or mean arterial pressure greater than 105 mm Hg
- Symptoms of pre-eclampsia
- Multiple gestation
- Symptoms of UTI
- Chronic hypertension by history or currently on hypertension medication

Breastfeeding

Women in the US Need More Breastfeeding Support

CONCLUSIONS: Our findings indicate a need to provide extensive breastfeeding support after delivery, particularly to women who may experience difficulties in breastfeeding.

Ahluwalia IB, et al
Why do women stop breastfeeding? Findings from the Pregnancy Risk Assessment and Monitoring System. Pediatrics. 2005 Dec;116(6):1408-12.

SAVE THE DATES

National Conference on Juvenile Issues

- January 9–13, 2006
- Washington, DC
- Coordinating Council on Juvenile Justice and Delinquency Prevention
- Office of Juvenile Justice and Delinquency Prevention
- **www.juvenilecouncil.gov/2006NationalConference/index.html**

21st Annual Midwinter Indian Health OB/PEDS Conference

- January 27–29, 2006
- Telluride, CO
- For providers caring for Native women and children
- Contact Alan Waxman **AWaxman@salud.unm.edu**

Native Peoples of North America HIV/AIDS Conference

- May 3–6, 2006
- Anchorage, Alaska
- Embracing Our Traditions, Values, and Teachings
- **www.embracingourtraditions.org**

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Abstracts of the Month

- Routine screening for protein and glucose at each prenatal should be abandoned

IHS Child Health Notes

- Articles of Interest—Antibiotic treatment of children with sore throat
- Announcements from the AAP Indian Health Special Interest Group—Listing of Funding Opportunities
- 2006 CATCH Implementation Funds—Call for Proposals—Deadline: January 31, 2006

From Your Colleagues

- Bonnie Bishop-Stark, ANMC—How do you know when you have a false positive HIV test in pregnancy?
- Myra Tucker, CDC— An invitation to Submit Manuscripts to the Maternal and Child Health Journal
- Alan Waxman, Albuquerque—Vaccine prevents cervical cancer, Gardasil: Preliminary results 100% effective
- Leslie Randall, Aberdeen—PHN visits, maternal EtoH use, and layers of clothing are important risk factors for SIDS

Hot Topics

- Obstetrics—Paroxetine's pregnancy category changed from C to D
- Gynecology—Handle abnormal Pap smears differently in adolescents & Other exceptions for adolescents:
- Child Health—Guidelines for Identifying and Referring Persons with Fetal Alcohol Syndrome
- Chronic disease and Illness—Stroke preventive treatments are well understood and widely available: Why isn't it used?

Features

- ACOG—Inappropriate use of the terms fetal distress and birth asphyxia
- Midwives Corner—Liability in Triage: EMTALA Regulations and Common Obstetric Risks
- Featured Website—The Indian Health Women's Health pages are getting a facelift and needs input
- MCH Alert—New cigarettes with flavors that appeal to youth
- Navajo News—MRSA presents new challenges in treating skin and soft-tissue infections, including in pregnancy….