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

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Evidence does not justify routine use:
Magnesium sulfate for mild pre-eclampsia

Number of patients treated to prevent one convulsive episode:

Severe pre-eclampsia = 71
Mild pre-eclampsia = 385

The pathogenesis of eclamptic convulsions remains unknown. Cerebral imaging suggests that cerebral abnormalities in eclampsia (mostly vasogenic edema) are similar to those found in hypertensive encephalopathy. However, cerebral imaging is not necessary for the diagnosis or management of most women with eclampsia. The onset of eclamptic convulsions can be antepartum (38–53%), intrapartum (18–36%), or postpartum (11–44%). Recent data reveal an increase in the proportion of women who develop eclampsia beyond 48 hours after delivery. Other than early detection of preeclampsia, there are no reliable tests or symptoms for predicting the development of eclampsia. In developed countries, the majority of cases reported in recent series are considered unpreventable.

Magnesium sulfate is the drug of choice for reducing the rate of eclampsia developing intrapartum and immediately postpartum. There are 4 large randomized trials comparing magnesium sulfate with no treatment or placebo in patients with severe preeclampsia. The rate of eclampsia was significantly lower in those assigned to magnesium sulfate (0.6% versus 2.0%, relative risk 0.39, 95% confidence interval 0.28–0.55).

Thus, the number of women needed to treat to prevent one case of eclampsia is 71. Magnesium sulfate is the drug of choice to prevent recurrent convulsions in eclampsia. The development of eclampsia is associated with increased risk of adverse outcome for both mother and fetus, particularly in the developing nations. Pregnancies complicated by eclampsia require a well-formulated management plan. Women with a history of eclampsia are at increased risk of eclampsia (1–2%) and preeclampsia (22–35%) in subsequent pregnancies. Recommendations for diagnosis, prevention, management, and counseling of these women are provided based on results of recent studies and my own clinical experience.

Baha M. Sibai, MD Diagnosis, Prevention, and Management of Eclampsia Obstetrics & Gynecology 2005;105:402-410

OB/GYN CCC Editorial

Mild pre-eclampsia

Number treated = 385 in Western countries

Evidence for magnesium sulfate prophylaxis in mild pre-eclampsia does not justify its routine use. Magnesium sulfate therapy should be considered for prevention of eclampsia in all women with severe preeclampsia. Worldwide, to prevent one case of eclampsia, 63-71 women with severe preeclampsia or 109 women with moderate preeclampsia would need to be treated (Altman 2002).

On the other hand, if only women with mild disease in Western countries are considered, 385 women would need to be treated to prevent one

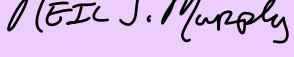
(continued on page 15)

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.



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

IHS Child Health Notes

November 2005

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

"If everyone is thinking the same thing, then not everyone is thinking."
—General George Patton

Articles of Interest

A developmental model for rural telepsychiatry

Psychiatr Serv. 2005 Aug;56(8):976-80.

Summary

The authors describe their experience in setting up and operating telepsychiatry clinics for rural American Indian veterans suffering from post traumatic stress disorder. They suggest that this modality can serve to partially alleviate disparities in access to mental health services for this underserved population. "The isolation, poverty, and lack of relevant services in rural American Indian communities combine to render telepsychiatry an attractive means of increasing access to care." They present their model as a potential "road map" to be used by others in the development of telepsychiatry clinics in other rural underserved locations.

Editorial Comment

It is no secret that American Indian/Alaska Native people face significant barriers to health care access. Nowhere are the barriers greater and access more limited than for mental illness. Here at Fort Defiance, we are seeking to open the first on-Reservation Adolescent Acute Care Unit. Successful development of this program has been hampered by our inability to recruit an appropriately trained psychiatrist. Difficulty in recruiting good mental health professionals is, unfortunately, not an uncommon experience within IHS.

Currently, our program is vigorously investigating the promise of telepsychiatry as a means to move forward. For us, telepsychiatry may be the sole modality available which will allow us to open our doors to this much-needed service. Others might consider investigating telepsychiatry in an effort to address the specific mental health needs of their communities.

Infectious Disease Updates.

Rosalyn Singleton MD MPH

Hepatitis B Infection and Vaccine—Who is still at risk? Is it time to boost yet?

Shepard CW, Finelli L, Fiore AE, Bell BP. Epidemiology of hepatitis B and hepatitis B virus infection in United States children. Pediatr Infect Dis J 2005;24:755-760.

Dentinger CM, McMahon BJ, Butler JC, et al. Persistence of antibody to hepatitis B and protection from disease among Alaska Natives immunized at birth. Pediatr Infect Dis J 2005;24:786-792.

Summary

Before hepatitis B (HB) vaccination, Alaska Native (AN) children were at extremely high risk for HB infection, primarily by child-to-child transmission. Since 1983 universal vaccination has nearly eliminated hepatitis B infections in AN children. In a 1993–4 serosurvey in Bristol Bay, Alaska, no child <10 years old had chronic HB infection, in contrast to 16% of older persons. The incidence of acute icteric hepatitis B among all AN decreased from 53/100,000 in 1982 to ~1.7/100,000 in 2002. The U.S. incidence of acute hepatitis B in <18 year olds decreased to 0.3/100,000 during this same time. However, acute hepatitis B rates among 15-19 year olds in the U.S. are still higher (1.1/100,000) than in younger children, because of high-risk behaviors and a smaller proportion of vaccinated individuals. High rates of hepatitis B infection, associated with high-risk behaviors, such as injection drug use, have been reported among urban American Indian adolescents.

After 3-dose series of HB vaccine >95% of infants develop protective antibodies (>10 mIU/mL) but the duration of protection has not been established. The Alaska Viral Hepatitis Program and CDC recently reported data on the duration of antibody to hepatitis B (anti-HBs) in 334 children successfully immunized in infancy and followed for a median of 10 years. Among 10 year olds only 8% still had protective anti-HBs concentrations. However, during >3000 person years of follow-up only six children acquired anti-HBc. None of these children had detectable surface antigen or developed symptomatic hepatitis suggesting that these were successfully defended exposures rather than clinical infections. This study adds to the evidence that, while antibody titers decline over time, immune memory remains, and booster doses of HB vaccine are not required at this time.

Recent literature on American Indian/ Alaskan Native Health

Doug Esposito, MD

Outbreak of invasive Haemophilus influenzae serotype a disease.

Pediatr Infect Dis J. 2005 May;24(5):453-6..

Highlights

- The authors report a cluster of 5 cases of Haemophilus influenza type a (Hia) invasive disease occurring in 3 infants from a remote area in western Alaska.
- Two of the 3 infants experienced recurrent disease. However, both proved to be true re-infections and not treatment failures.
- This is apparently the first report of recurrent Hia invasive disease in children. It is notable that invasive non-Haemophilus influenzae type b (Hib) disease is overall fairly uncommon.

➔

- Each infant with recurrent disease was found to be in contact with at lease one identified close-contact carrier.
- No guidelines exist for chemoprophylaxis of close contacts of cases of Hia invasive disease. Nevertheless, chemoprophylaxis (based on Hib disease guidelines) was dispensed to close contacts of the recurrent cases due to the suspicion that household transmission might have been occurring. Patients and contacts were re-tested following treatment and found to be free of the organism.
- The authors could not prove or disprove increased virulence of the disease causing strain.
- It was found that a single Hia strain was the cause of invasive disease in this outbreak. Additionally, an absence of Hia carriage was found in one of the outbreak villages during a previously conducted and unrelated oropharyngeal carriage study done for unrelated reasons. Therefore, it is surmised that either introduction or emergence of a new pathogenic strain occurred in this geographically isolated region.
- A relationship between the reduction in nasopharyngeal carriage of Hib resulting from the successful Hib vaccination campaign and the emergence of Hia in its place could generally not be substantiated.

Editorial Comment

Despite apparent threats to the job security of pediatric providers, successful vaccination campaigns are wonderful, and Hib ranks as one of the true triumphs. Of course, smallpox figures as the granddaddy of them all, and polio is poised to become the grand mammy! So when are we going to get after RSV? Anyway, Hib disease has all but disappeared from the American medical scene since introduction of conjugate vaccine in the mid 1990s.

A concern of many public health officials has been that other invasive bugs might occupy the ecologic niches vacated by the microorganisms targeted by successful immunization programs. As the bad bugs are forced from the neighborhood, will other possibly more virulent riffraff move in? In the case of Hib, it has been feared that rising rates of non-Hib carriage and disease might be observed following widespread immunization. So far, nothing so dire appears yet to have occurred.

The article by Hammitt et al serves as a reminder to the medical community that we must not let our guard down. As they suggest, "Continued surveillance is necessary to monitor H. Influenzae invasive disease." Rapid recognition on the part of practicing clinicians and public health officials of the occurrence of disease clusters and their possible relationship to the emergence of disease is crucial. Great job, Alaska! Such articles also require us all to recall our basic sciences, and to apply our public health knowledge.

Additional Reading

For more eloquent and expert prose on the subject the interested reader will certainly want to refer to the excellent articles listed below:

Nature abhors a vacuum, but public health is loving it: the sustained decrease in the rate of invasive Haemophilus influenzae disease. Clin Infect Dis. 2005;40(6):831-3.

Epidemiology of invasive Haemophilus influenzae type A disease among Navajo and White Mountain Apache children, 1988-2003. Clin Infect Dis. 2005;40(6):823-30.

Invasive serotype a Haemophilus influenzae infections with a virulence genotype resembling Haemophilus influenzae type b: emerging pathogen in the vaccine era? Pediatrics. 2001;108(1):E18.

American Academy of Pediatrics—Indian Health Special Interest Group

Sunnah Kim, AAP Staff
Pediatric Locums Service

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

The Impact of Medicaid Reform on Indian Health Programs

The Kaiser Network has recently made this Web cast available on-line. A roundtable event, involving the Northwest Portland Area Indian Health Board, National Indian Health Board and the Urban Institute, brought together Tribal leaders and health directors to understand the implications for American Indians and Alaska Natives in Medicaid reform proposals under consideration by the Medicaid Commission, the National Governors Association, the Administration, and Congress. This Web cast is available at **http://cme.kff.org/Key=9048.L0.D.D.MxWm4W**

Gynecology

Tubo-ovarian abscess
Ultrasound-guided aspiration with antibiotics: First-line procedure

The main indications for surgery were diagnostic or therapeutic uncertainty, such as suspected residual tubo-ovarian abscess or pain. No procedure-related complications were diagnosed.

Gjelland K, Ekerhovd E, Granberg S. Transvaginal ultrasound-guided aspiration for treatment of tubo-ovarian abscess: a study of 302 cases. Am J Obstet Gynecol. 2005 Oct;193(4):1323-30

From Your Colleagues

Carolyn Aoyama, HQE

Excess Cervical Cancer Mortality: Marker for Low Access to Health Care in Poor

The NCI Center to Reduce Cancer health Disparities postulates that cervical cancer is an indicator of larger health system concerns such as infrastructure, access, culturally competent communication, etc. An entrenched pattern of high cervical cancer mortality has existed for decades in distinct populations and geographic areas including American Indian women of the Northern Plains, Alaska Native women, African American women in the South, Latina women along the Texas-Mexico border, Caucasian women in Appalachia, and Vietnamese American women.

The report concludes by stating that cervical cancer is the US is overwhelmingly a disease of poor women with low educational attainment who are not receiving PAP tests. In addition to being an avoidable cause of death, cervical cancer mortality is a marker for the ill health and human suffering of women who are uninsured, underinsured, and dependent on publicly funded health services. The report goes on to make the case that cervical cancer is a marker for other chronic diseases, poverty and lack of access. It is an amazing report which validates everything those clinicians who work with vulnerable populations have voiced for years.

http://crchd.nci.nih.gov

Richard Olson, HQE

Medical Staff Credentialing and Privileging Guide, 3rd Edition: Now available

Please disseminate widely to IHS and Tribal programs that the 3rd edition of the IHS Medical Staff Credentialing and Privileging Guide is now available on line at the URL below. This has been developed by Marty Smith, Claremore, and Michele Gemelas, Warm Springs, two of the credentialing experts in the IHS. It will be enormously helpful to individuals who provide this function at the Area or local facility level. Special thanks to Marty and Michele who have been working on this for much of the past year.

www.ihs.gov/NonMedicalPrograms/nc4/Documents/revisedIHScredentialingguide.pdf

Judy Thierry, HQE

We would like to hear from people—Diabetes in pregnancy

The Diabetes in Pregnancy Best Practice Workgroup is interested in knowing if there are any programs that are tracking maternal and infant outcomes for women who have had diabetes in pregnancy. Is anyone keeping data either from RPMS or from chart extraction on these women and their offspring (complications, birth wt, gestational age, insulin treatment, method of delivery, etc)? Judith.Thierry@ihs.gov

Seh Welch, NIH/OD

Embracing Our Traditions, Values, and Teachings: Native Peoples of North America HIV/AIDS Conference, May 2-6, 2006; Anchorage, Alaska

The Embracing Our Traditions, Values, and Teachings: Native Peoples of North America HIV/AIDS Conference is the first national conference on HIV/AIDS and Native peoples that is planned by and for members of the target population. More than 800 researchers, clinicians, social service providers, advocates, Government representatives, and Native people living with HIV/AIDS are expected to share in multiple sessions organized around six conference tracks: Research, Mental Health, Prevention, Special Populations and Stigma, Spiritual Issues and Leadership, and Treatment, Care, and Support. The William A. Egan Civic & Convention Center in Anchorage is the primary conference venue.

The impact of HIV and AIDS on Native communities may appear small when compared with that in some other populations. But because the Native population in the United States numbers only about 2.6 million, rising infection rates can have a huge overall impact on this small population.

Deadlines for submitting abstracts and scholarship applications to Embracing Our Traditions have passed, but registration is open to all interested parties. Additional information is available at the conference Web site, www.embracingourtraditions.org, or by contacting the Conference Secretariat at 800-749-9620 or by e-mail at embracingourtraditions@s-3.com. welchseh@od.nih.gov.

Hot Topics

Obstetrics

A Call to End Routine Episiotomy, No Maternal Benefit

There is no maternal benefit from episiotomy, and in some cases postpartum injuries could have been averted had episiotomy not been routine. Limiting its use to fetal indications can reduce episiotomy rates to as little as 8 to 10 percent, but rates of less than 15 percent should be immediately realizable.

Hartmann K, et al. Outcomes of routine episiotomy: a systematic review. JAMA May 4, 2005;293:2141-8.

First trimester combined screening better than 2nd trimester quadruple screening NEJM

RESULTS: First-trimester screening was performed in 38,167 patients; 117 had a fetus with Down's syndrome. At a 5 percent false positive rate, the rates of detection of Down's syndrome were as follows: with first-trimester combined screening, 87 percent, 85 percent, and 82 percent for measurements performed at 11, 12, and 13 weeks, respectively; with second-trimester quadruple screening, 81 percent; with stepwise sequential screening, 95 percent; with serum integrated screening, 88 percent; and with fully integrated screening with first-trimester measurements performed at 11 weeks, 96 percent. Paired comparisons found significant differences between the tests, except for the comparison between serum integrated screening and combined screening. CONCLUSIONS: First-trimester combined screening at 11 weeks of gestation is better than second-trimester quadruple screening but at 13 weeks has results similar to second-trimester quadruple screening. Both stepwise sequential screening and fully integrated screening have high rates of detection of Down's syndrome, with low false positive rates.

Malone FD, et al First-trimester or second-trimester screening, or both, for Down's syndrome. N Engl J Med. 2005 Nov 10;353(19):2001-11.

Gynecology

Have you ever had problems with a stenotic cervix?

You probably already know this, but I just heard this tip on a recent ACOG Update cassette tape.* This tip should apply to other procedures that require cervical cannulation, as well.

They discuss two regimens:
(These can be done orally or vaginally)

PRE MENOPAUSAL: 200 mcg 8 -12 hours pre procedure

POST MENOPAUSAL: Start 2 days pre procedure taking 200 mcg 48 hours pre and a second 200 mcg dose 8 – 12 hours pre procedure.

Resource:

**Hysteroscopy, Replacing Old Gynecologic Procedures ACOG Update Series Vol. 30, No. 10, p 2. Many other resources available in the online newsletter.*

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

An experimental vaccine against cervical cancer has moved a step closer toward becoming the first cancer vaccine of any kind on the market.

The vaccine was 100% effective in preventing cervical cancer and precancerous changes tied to two types of a common sexually transmitted virus.

The report is the first from a large-scale trial of a cancer vaccine. In April, researchers published similarly encouraging results from a smaller study of the Merck vaccine.

Merck plans to apply to the Food and Drug Administration by year's end for permission to sell the vaccine. There is the potential it could be available late next year, assuming all goes well.

The vaccine, called Gardasil, targets human papillomavirus (HPV) types 16 and 18, thought to cause 70% of cervical cancers, and HPV types 6 and 11, associated with 90% of genital warts cases. Up to 70% of sexually active women will become infected with HPV, which clears up on its own more than nine times out of 10. Lasting infection causes virtually all cervical cancers.

In April, the researchers suggested that the vaccine might be most effective in 10- to 13-year-olds, who are not likely to be infected with HPV.

Preteens and adolescents, sexually active or not, could receive the HPV vaccine along with the other shots they're required to get, said co-investigator Kevin Ault.

It would be just as important to vaccinate boys as girls, Ault said. He cited the rubella vaccine to illustrate his point. All babies are immunized against rubella to prevent them from spreading the disease to pregnant women, because it can cause birth defects.

Merck is testing the vaccine in girls and boys as young as 9. The FDA will decide whether it should be sold for use in preteens. The latest findings from the company-funded study, involved more than 12,000 females, ages 16 to 23. They were randomly assigned to receive either the three-shot vaccine or placebo shots. The analysis began a month after they received their last shot and continued for an average of 16 months. None of the females who received the vaccine was found to have precancerous changes or cervical cancer, compared with 21 of those who received the placebo shots. *(more on page 15, Gardasil, and sidebar)*

Child Health

Advanced skills practitioner not needed at uncomplicated elective cesarean delivery

CONCLUSIONS: The results of this study suggest that an advanced skills practitioner need not be present at uncomplicated elective CS under regional anesthesia provided there are no other risk factors, namely, fetal distress and noncephalic presentation. Conversely, an advanced skills practitioner is ➔

➔required at emergency CS, CS under general anesthesia, and in the presence of fetal distress and noncephalic presentation.

Gordon A, et al Pediatric presence at cesarean section: justified or not? Am J Obstet Gynecol. 2005 Sep;193(3 Pt 1):599-605.

Complications of Body Piercing

The trend of body piercing at sites other than the earlobe has grown in popularity in the past decade. The tongue, lips, nose, eyebrows, nipples, navel, and genitals may be pierced. Complications of body piercing include local and systemic infections, poor cosmesis, and foreign body rejection. Swelling and tooth fracture are common problems after tongue piercing. Minor infections, allergic contact dermatitis, keloid formation, and traumatic tearing may occur after piercing of the earlobe. "High" ear piercing through the ear cartilage is associated with more serious infections and disfigurement. Fluoroquinolone antibiotics are advised for treatment of auricular perichondritis because of their antipseudomonal activity. Many complications from piercing are body-site-specific or related to the piercing technique used. Navel, nipple, and genital piercings often have prolonged healing times. Providers should be prepared to address complications of body piercing and provide accurate information to patients.

Am Fam Physician 2005;72:2029-34, 2035-6

Skin-to-Skin Care Cuts Stress for NICU Infants and Mothers

CONCLUSIONS: Our results lend additional support to the value of skin-to-skin care in neonatal intensive care. Variable stress responses in preterm infants favor the need for individualized care. The mothers' need for support seem to be more pronounced in the first skin-to-skin session as our results show a higher degree of stress as compared with later skin-to-skin care

Morelius E, et al Salivary cortisol and mood and pain profiles during skin-to-skin care for an unselected group of mothers and infants in neonatal intensive care. Pediatrics. 2005 Nov;116(5):1105-13.

AAP Revises Recommendations on Reducing the Risk of SIDS—Pearls for Practice

- Independent risk factors identified for SIDS include the prone sleep position, sleeping on a soft surface, maternal smoking during pregnancy, overheating, late or no prenatal care, preterm and/or low birth weight, and male sex.
- The AAP updated recommendations for SIDS prevention includes reinforcing the safety of the back sleeping position, avoidance of overheating and smoking during pregnancy, avoidance of bedsharing and the use of pacifiers in the first year of life. Home monitors are not recommended as a routine SIDS prevention strategy.

www.aap.org/ncepr/sids.htm

Chronic disease and Illness

Beyond Red Lake—
The persistent crisis in American Indian Health Care

…Some Americans purport to believe that the problems of American Indians have been solved by economic enterprises such as casinos. But the enormous successes of a few tribal casinos in the Northeast are far from the norm. The bright lights and ringing bells in most casinos do no more than divert attention from the continued challenges and hardships faced by Indian communities each day. And far too little has changed since I worked in that community 10 years ago.

Although the federal government has a trust responsibility to provide health care for American Indians and Alaska Natives, the Indian Health Service is substantially underfunded and understaffed. This service was established in 1955 to provide primary care and public health services on or near Indian reservations. Although it can take credit for great improvements in health status, significant disparities in health and the quality of care persist 50 years later

Many factors contribute to these disparities, but the failure of the federal government to adequately fund the Indian Health Service for the provision of care to the 1.8 million patients it is supposed to serve means that the promises of treaties signed in the 1800s have never been fulfilled. Indian Health Service per capita health care expenditures are much lower than those of other health care systems in the United States.

I left that community after three years, the last two of them as the medical director. During my stay, I tried to improve the quality of health care by implementing changes in the clinic structure and hiring well-qualified physicians. My efforts, however, were constantly thwarted by obstacles to good health that extended far beyond the hospital — problems whose roots lie in the high rates of poverty, unemployment, alcoholism, and other ongoing public health crises. I hope, at least, that the tragedy in Red Lake serves as a wake-up call to the federal government and health professionals about the pressing need for more resources to address the persistent crisis in health care for American Indians and Alaska Natives…

Roubideaux Y. Beyond Red Lake—the persistent crisis in American Indian health care. New England Journal of Medicine Nov 3, 2005; 353: 1881-1883

Features

American Family Physician—Patient-Oriented Evidence that Matters

Antiviral Agents for Pregnant Women with Genital Herpes

CLINICAL QUESTION: Do antiviral medications prevent perinatal transmission of genital herpes to neonates?

EVIDENCE-BASED ANSWER: There is no evidence that the use of antiviral agents in women who are pregnant and have a history of genital herpes prevents perinatal transmission of herpes simplex virus (HSV) to neonates. [Strength of recommendation: A, based on multiple systematic reviews]

However, treatment with antivirals during the last month of pregnancy does reduce the rate of HSV outbreaks in pregnant women and the resultant need for cesarean delivery. [Strength of recommendation: A, based on multiple systematic reviews]

CLINICAL COMMENTARY: With the evidence that antiviral treatment reduces the rates of maternal HSV outbreaks in the perinatal period and subsequent cesarean deliveries, one could argue that maternal morbidity and costs are decreased with treatment. A cheap, safe medicine (acyclovir) and a small NNT of 93 add credence to this argument. Despite the lack of data regarding the outcome of neonatal HSV infection, the sample size required is so large that such a study may never be performed. Thus, acyclovir use for the prevention of perinatal HSV in the final month of pregnancy appears to be a reasonable treatment option.

FPIN's Clinical Inquiries **www.aafp.org/afp/20051101/fpin.html**

Low Testosterone Not Linked with Female Sexual Dysfunction

CLINICAL QUESTION: Is a low level of serum testosterone associated with low sexual desire in women?

BOTTOM LINE: Low levels of total and free testosterone are not associated with low sexual desire and function in women. A serum DHEA level below the age-adjusted 10th percentile is a better marker for low sexual desire and function, but the majority of women with a low level of DHEA do not have sexual dysfunction. There is no evidence to support the measurement of serum testosterone in women with low sexual desire or function. The practice of prescribing exogenous testosterone for women with low sexual desire or function requires further study and should not be routine. (Level of Evidence: 2c)

Davis SR, et al. Circulating androgen levels and self-reported sexual function in women. JAMA July 6, 2005;294:91-6.

ACOG

Compounded Bioidentical Hormones

ABSTRACT: Compounded bioidentical hormones are plant-derived hormones that are prepared, mixed, assembled, packaged, or labeled as a drug by a pharmacist and can be custom made for a patient according to a physician's specifications. Most compounded products have not undergone rigorous clinical testing for safety or efficacy, and issues regarding purity, potency, and quality are a concern. Compounded hormone products have the same safety issues as those associated with hormone therapy agents that are approved by the U.S. Food and Drug Administration and may have additional risks intrinsic to compounding. There is no scientific evidence to support claims of increased efficacy or safety for individualized estrogen or progesterone regimens.

Compounded bioidentical hormones. ACOG Committee Opinion No. 322. American College of Obstetricians and Gynecologists. Obstet Gynecol 2005; 106:1139–40.

Elective Coincidental Appendectomy

ABSTRACT: Because of a lack of evidence from randomized trials, it remains unclear whether the benefits of routine elective coincidental appendectomy outweigh the cost and risk of morbidity associated with this prophylactic procedure. Because the risk–benefit analysis varies according to patient age and history, the decision to perform an elective coincidental appendectomy at the time of an unrelated gynecologic surgical procedure should be based on individual clinical scenarios and patient characteristics and preferences.

Elective coincidental appendectomy. ACOG Committee Opinion No. 323. American College of Obstetricians and Gynecologists. Obstet Gynecol 2005;106:1141–2.

Breastfeeding

The breastfeeding mother is physiologically different

The breastfeeding mother's body is hormonally different from mothers who aren't breastfeeding and other adults. Oxytocin and other hormones released during breastfeeding help the mother and baby sleep with mutual and mostly synchronous arousals. "Kangaroo Care" research has documented that when the mother and baby are skin-to-skin, the mother's body will warm to warm her baby AND cool to cool the baby. Only the MOTHER's body will cool down if the baby gets too warm while resting on her chest. Other people holding the baby do not react this way.

Ludington-Hoe SM, et al Randomized controlled trial of kangaroo care: cardiorespiratory and thermal effects on healthy preterm infants. Neonatal Netw. 2004 May-Jun;23(3):39-48.

Alaska State Diabetes Program

Barbara Stillwater

Big Babies at Risk of Obesity Later in Life

CONCLUSIONS: Infants who are at the highest end of the distribution for weight or body mass index or who grow rapidly during infancy are at increased risk of subsequent obesity.

Baird J, et al Being big or growing fast: systematic review of size and growth in infancy and later obesity. BMJ. 2005 Oct 22;331(7522):929.

Rate of BMI Increase in Childhood Predicts Risk of Adult Heart Disease

Low birth weight and a combination of low BMI at 2 years and high BMI at 11 years, reflecting rapid weight gain between age 2 and 11 years, predicts later CHD.

CONCLUSIONS: On average, adults who had a coronary event had been small at birth and thin at two years of age and thereafter put on weight rapidly. This pattern of growth during childhood was associated with insulin resistance in later life. The risk of coronary events was more strongly related to the tempo of childhood gain in BMI than to the BMI attained at any particular age.

Barker DJ, et al Trajectories of growth among children who have coronary events as adults. N Engl J Med. 2005 Oct 27;353(17):1802-9.

Just an additional 3200 steps a day, not 10,000 shows fitness gains— Any Level of Exercise Can Help

CONCLUSIONS: Exercising at a level of 19 km/wk at 40 to 55% of peak V(O_2) is sufficient to increase aerobic fitness levels, and increasing either exercise intensity or the amount beyond these parameters will yield additional separate and combined effects on markers of aerobic fitness. Therefore, it is appropriate to recommend mild exercise to improve fitness and reduce cardiovascular risk yet encourage higher intensities and amounts for additional benefit.

Duscha BD, et al Effects of exercise training amount and intensity on peak oxygen consumption in middle-age men and women at risk for cardiovascular disease. Chest. 2005 Oct;128(4):2788-93

Ask a Librarian

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

All clinicians involved with Indian Health are now invited: Tribal, urban, IHS

Now, All Indian Health clinicians, (Read as tribal, urban, and IHS) including those not on the IHS Wide Area Network (WAN) have desk-top access to full-text online clinical journals and other resources. The service is provided through a special arrangement IHS has with the National Institutes of Health (NIH) library. Previously, only clinicians on the WAN could access the service. If you have WAN access, continue to use the library resources through **http://hsrl.nihlibrary.nih.gov**

If you are not on the WAN, you can get access by entering a userid and password.

To obtain your id and password, contact your Indian Health Service Informationist, Diane Cooper, at 301 594-2449 OR Diane.Cooper2@ihs.gov

Your informationist is available to help you with literature searches, help you use the electronic resources, and work with you or your team on IHS projects where information is needed.

OB/GYN CCC Editorial

It has long been the dream of the Chief Clinical Consultants, and others in Indian Health, to have a national library virtual resource for ALL clinicians who care for Indian patients, no matter how remote their facility. That dream just became a reality. This is a great resource.

This service has been available to approximately one half of Indian Health clinicians for the last year or so. It is now available to the other half as well. I use it every day and encourage you to also. Kudos to Diane Cooper, Terry Cullen, and the NIH staff.

Family Planning

FDA Updates Labeling for Ortho Evra Contraceptive Patch

The Food and Drug Administration today approved updated labeling for the Ortho Evra contraceptive patch to warn healthcare providers and patients that this product exposes women to higher levels of estrogen than most birth control pills. Ortho Evra was the first skin patch approved for birth control.

It is a weekly prescription patch that releases ethinyl estradiol (an estrogen hormone) and norelgestromin (a progestin hormone) through the skin into the blood stream. FDA advises women to talk to their doctor or healthcare provider about whether the patch is the right method of birth control for them.

Furthermore, women taking or considering using this product should work with their health care providers to balance the potential risks related to increased estrogen exposure against the risk of pregnancy if they do not follow the daily regimen associated with typical birth control pills. Because Ortho Evra is a patch that is changed once a week, it decreases the chance associated with typical birth control pills that a woman might miss one or more daily doses.

The addition of this new warning is a result of FDA's and the manufacturer's analysis directly comparing the levels for estrogen and progestin hormones in users of Ortho Evra with those in a typical birth control pill. In general, increased estrogen exposure may increase the risk of blood clots. However, it is not known whether women using Ortho Evra are at a greater risk of experiencing these serious adverse events.

The new bolded warning specifically states that women who use Ortho Evra are exposed to about 60 percent more total estrogen in their blood than if they were taking a typical birth control pill containing 35 micrograms of estrogen. However, the maximal blood level of estrogen (peak blood levels) is about 25% lower with Ortho Evra than with typical birth control pills. While the estrogen level with the patch remains constant for one week until the patch is removed, the peak blood levels with a daily birth control pill rapidly declines to levels that are lower than on the Orthro Evra.

FDA is continuing to monitor safety reports for the Ortho Evra patch. The manufacturer, Ortho McNeil Pharmaceuticals is conducting additional studies to compare the risk of developing serious blood clots in women using Ortho Evra to the risk in women using typical birth control pills that contain 35 micrograms of estrogen.

The new labeling information is available along with additional information for healthcare providers and consumers online at: **www.fda.gov/cder/drug/infopage/orthoevra/default.htm**

DMPA bone mass loss is reversible

DMPA use in young women causes significant bone mineral density loss at the hip and spine. They also note that there are significant gains in bone mineral density when DMPA is discontinued, suggesting that the bone mass loss is reversible.

Scholes D, et al. Change in bone mineral density among adolescent women using and discontinuing depot medroxyprogesterone acetate contraception. Arch Pediatr Adolesc Med February 2005;159:139-44.

Nurses Corner

Stressful workplaces and unfair bosses can raise cardiac risks

CONCLUSION: Justice at work may have benefits for heart health among employees.

Kivimaki M, et al Justice at Work and Reduced Risk of Coronary Heart Disease Among Employees: The Whitehall II Study. Arch Intern Med. 2005 Oct 24;165(19):2245-51.

Information about job stress: American Psychological Association **www.apa.org**

Domestic Violence

GPRA Domestic Violence clinical performance indicators

The October edition The IHS Primary Care Provider also has an article on the GPRA IPV/DV clinical performance indicator and the RPMS IPV/DV Screening Exam Code.

www.ihs.gov/PublicInfo/Publications/HealthProvider/provider.asp

Questions
Theresa.Cullen@IHS.GOV

Medical Mystery Tour

The HCG curve has been redefined. Now what?

Let us recap what we learned last month. The data on the old adage that normal pregnancies increase by 66 percent every 48 hours was based on studies of 29 and 36 patients. (Daya, Kadar) More recent data from 287 patients showed the slowest or minimal rise for a normal viable intrauterine pregnancy was 24% at 1 day and 53% at 2 days. (Barnhart)

The Barnhart et al data re-defined the slowest rise in serial hCG values for a potentially viable gestation and will aid in distinguishing a viable early pregnancy from a miscarriage or ectopic pregnancy. The minimal rise in serial hCG values for women with a viable intrauterine pregnancy is "slower" than previously reported, suggesting that intervention to diagnosis and treat an abnormal gestation should be more conservative. The use of the more conservative data on HCG rise will hopefully lead to less need for invasive procedures and/or unnecessary use of methotrexate.

We also learned that the HCG/ultrasound discriminatory zone can vary. It can be from 2000–2500. One thought to ponder for this month, if the HCG curve has been redefined in symptomatic patients with an early viable intrauterine pregnancy…. Just how accurate is our other major modality in diagnosing ectopic?

How else can you follow HCG ?

If you choose to perform a dilation and curettage and measure the HCG 12 hours later, it should fall by 15% if you completely evacuated a miscarriage. If it doesn't fall, you should move to confirm the diagnosis of an ectopic pregnancy.

What it accuracy of ultrasound in R/O ectopic?

In our patient's case her HCG was increasing by 53-54% every 48 hours, which we now see can be quite normal. When her HCG was below 2000 the predictive value of an ultrasound can be as low as 40%. That means the chance her ultrasound was correct, for either intrauterine pregnancy or ectopic pregnancy, can be as low as 40%. With an HCG less than 2000 one will be wrong 4 out of 10 times.

If ultrasound diagnoses were considered definitive, 4 out 10 women might have unnecessary surgical intervention, perhaps with interruption of desired intrauterine pregnancies.

This is an area on the HCG curve where providers can be misled because in 48 more hours the HCG can be nearly 4000 and then the ultrasonographer will be able to demonstrate a heartbeat. It may be in this period that the patient received methotrexate therapy or a surgical interruption of a viable pregnancy.

So the pearl is to carefully correlate the US and HCG findings. If the patient is clinically stable and adherent with follow up, then it can be appropriate to follow the patient with an HCG of 1800 for 48 more hours.

What type of ultrasound characteristics should we find?

These findings are good to see: gestational sac, yolk sac, fetal pole, or a heartbeat. In some cases you may have trouble seeing the gestational sac and actually be misled by a pseudosac. A pseudosac is a thickening of the endometrium and it is just a vesicle-like structure.

Some intrauterine signs are more definitive for miscarriage, e.g., a gestational sac that is greater than 16 mm on average in three dimensions, or a fetal pole that has no heartbeat on repeat exams.

THERE CAN ALSO BE HELPFUL ADNEXAL FINDINGS: if you find a mass distinct from the ovary, cardiac activity, gestational sac, fetal pole outside of the uterus. There also can be a tubal ring or doughnut sign within the adnexa. Please note that of these adnexal findings only the finding of a heart beat in the adnexa is 100% sure.

OTHER SUGGESTIVE UNITED STATES FINDINGS OF ECTOPIC GESTATION: (a) A thickened endometrium with absence of an intrauterine gestational sac, (b) A small echogenic ring structure in the adnexa that is clearly separate from the ovary, (c) Presence of a live embryo and/or a yolk sac, (d) A rim of colour around the ectopic ring structure and trophoblastic flow on Colour Doppler, and (e) Presence of echogenic, fluid in the abdomen suggesting haemorrhage

Resource—Ultrasound

Barnhart KT, Simhan H, Kamelle SA. Diagnostic accuracy of ultrasound above and below the beta-hCG discriminatory zone. Obstet Gynecol. 1999 Oct;94(4):583-7.

Resource—HCG

Barnhart KT et al Symptomatic patients with an early viable intrauterine pregnancy: HCG curves redefined Obstet Gynecol 2004 Jul;104(1):50-5.

Perinatology Picks

George Gilson, MFM, ANMC

Medical Management of Early Pregnancy Failure

Any medical provider who cares for women will encounter first trimester pregnancy losses. Early pregnancy failure may present as overt vaginal bleeding and cramping with an open internal cervical os (incomplete or inevitable abortion), or bleeding and a closed os ("threatened abortion"). Most commonly, early pregnancy failures are silent. Also known as "blighted ovum", or "missed abortion", these are characterized clinically by failure of uterine growth, regression of symptoms of early pregnancy, and often by vaginal passage of scant, brown/old blood.

For the last century the standard management of early pregnancy failure has been dilation and curettage as soon as possible in order to minimize blood loss and the risk of infection. However, this is a management strategy that is not always readily available, especially in the remote rural setting where many of us practice. Surgical management is costly, occasionally may be complicated by uterine perforation, and may not be desired by the mother. Manual extraction with a vacuum syringe has been popularized in developing countries, and is simple and safe, but requires an open cervix. Expectant treatment may be the preferred option for many women, but may be accompanied by an undesired excessively long latent period and prolonged bleeding.

Medical management of early pregnancy failure has been well studied over the last decade, but still has not become a mainstream option in the United States, despite a favorable Cochrane review and several other meta-analyses. The above small study is just one of many documenting the safety and efficacy of this approach. It is critical to rule out ectopic pregnancy and a viable intrauterine pregnancy before initiating this protocol. Spontaneous unresolved early pregnancy failure usually requires transvaginal sonography, which may be a limitation in some of our settings. It is necessary to document either no embryonic pole ("empty sac"), or an embryonic pole >16 mm with no cardiac activity, and/or abnormal embryo growth (<0.6 mm/day over 1 week of observation and no heart beat). Presence of a yolk sac (implying that this is not an ectopic pregnancy) with a beta-hCG increasing <50% over 48 hours is also helpful. Misoprostol is a teratogen and should not be given to women with viable pregnancies.

Women who choose this option should sign informed consent, and be assured that they may "cross over" to surgical evacuation at any time, but especially if they have not passed the conceptus within 48 hours. The most studied, and, most likely most effective, regimen, utilizes intravaginal misoprostol 800 micrograms (four 200 mcg tablets), which may be repeated in 24 hours if expulsion of the gestational sac has not occurred. Success rates of over 80 per cent may be anticipated. Regimens using oral misoprostol seem to be somewhat less effective. Oral narcotic analgesics and anti-emetics may be used for management of patient discomfort. Prophylactic antibiotics are not necessary. The patient should be forewarned that significant bleeding is to be expected as the tissue is being passed.

If doubt exists as to whether the miscarriage has been completed, repeat endovaginal ultrasound may be done to document absence of the sac. Ultrasound findings of a widened endometrial stripe (>5 mm) have not been helpful in deciding who has completed their evacuation successfully, and are not necessary. Likewise, a decrease of at least 66–75% in pre-evacuation beta-hCG levels at 48 hours has been proposed as evidence of complete expulsion, but clinical evaluation is felt to be as or more accurate. Patients who do not expel the sac in 48 hours should be referred for surgical evacuation. One to 3 per cent of patients may experience bleeding heavy enough to require emergency curettage, but the incidence of transfusion has consistently been <1 per cent, the same as with planned surgical evacuation.

Misoprostol 600–800 mcg vaginally has also been used in the management of incomplete abortion with similar success rates, however the published experience is not as great as for missed abortion. At this time it may be recommended as an option in some of our more remote settings if surgical facilities are not immediately available and/or transport will be delayed.

Patient acceptance of medical management of miscarriage is high. Over 70–95 per cent of women in most studies would choose this management if needed again in the future, and a similar proportion would recommend it to a friend. This definitely seems to be an efficacious, cost-effective, and patient-friendly option for women with early pregnancy failure, realizing that it may not be appropriate for all such women.

Resources

Su LL, et al A prospective, randomized comparison of vaginal misoprostol versus intra-amniotic prostaglandins for midtrimester termination of pregnancy. Am J Obstet Gynecol. 2005 Oct;193(4):1410-4.

Zhang J et al A comparison of medical management with misoprostol and surgical management for early pregnancy failure. N Engl J Med 2005 Aug 25;353(8):761-9.

Chung TK et al Spontaneous abortion: a randomized, controlled trial comparing surgical evacuation with conservative management using misoprostol. Fertil Steril 1999 Jun;71(6):1054-9.

Navajo News

Jean Howe, Chinle

Once a day gentamicin intrapartum may provide better coverage for the fetus

Based on this study, other studies of 24-hour gentamicin dosing in newborns, and our increasing experience with 24-hour gentamicin dosing in other obstetric settings, it appears that 24-hour gentamicin dosing for chorioamnionitis offers likely fetal (and maternal) benefit and is more efficient overall. 'Yet another reason to consider daily dosing when gentamicin is used.

Gentamicin, an antibiotic widely used as part of treatment regimens for chorioamnionitis, pyelonephritis, and other infections often treated by obstetric providers, has traditionally been administered as a 2mg/kg loading dose with 1.5mg/kg as a maintenance dose every 8 hours. This dosing is based on "ideal body weight" which can generally be calculated by adding 2.3kg for every inch of a woman's height over 5 feet to a base of 45.5kg. In morbidly obese patients, adding 40% of the difference between actual and ideal body weight to the ideal body weight has been recommended [IBW + 0.4 (TBW - IBW)].

In the 90's, 24 hour Gentamicin dosing for postpartum endometritis was studied and found to be cost-saving and effective. This simplified regimen involves administration of 5-7mg/kg once every 24 hours. Again, the calculation is based on ideal body weight. The benefits of this approach include higher peak levels, a better safety profile, and less nursing time and expense. This regimen has also been used for postpartum endometritis and other infections but reservation about administering gentamicin as a single daily dose prior to delivery have persisted.

In this study, 38 laboring women with clinical chorioamnionitis received either 5.1 mg/kg every 24 hours or 120mg as a loading dose then 80mg every 8 hours. Maternal and cord gentamicin levels were obtained and fetal peak levels were calculated. Extrapolated fetal levels were 6.9µg/ml with 24 hour dosing vs. 2.9µg with standard dosing; the first is much closer to optimal neonatal peak values of 5-8µmg/ml and thus likely to offer more therapeutic benefit for the fetus without additional risk. No difference in outcome was noted; this may be due to the small sample size.

Locksmith, GJ, Chin, A, et al., High Compared with Standard Gentamicin Dosing for Chorioamnionitis: A Comparison of Maternal and Fetal Serum Drugs Levels, Obstetrics and Gynecology 2005;105:473-9.

Pedometers may help couch potatoes get sorely needed exercise

That's 3 Extra Miles a Day. Providing Pedometers Can Increases Physical Activity by 6000 Steps a day.

CONCLUSION: Women walk more when told to take 10,000 steps per day compared with those instructed to take a brisk 30-min walk. On days when women took a 30-min walk, their average step count was near 10,000.

Hultquist, C.N. et al Medicine & Science in Sports & Exercise, April 2005; vol 37: pp 678-683.

Midwives Corner

Marsha Tahquechi and Jenny Glifort

Which Cord strikes a sour note? Trends in cord care: Scientific Evidence for Practice

A thought provoking 2004 review of the literature which addresses the historical evolution of umbilical cord care practices and its impact on current cord care practices. The authors discuss the wide variety of approaches to cord care are primarily based on historical practice patterns and not on evidence based practice. For example much discussion centers around the use of isopropyl alcohol as an antimicrobial for cord care across hospitals in the U.S. though studies have demonstrated that it has no effect on preventing bacterial colonization and is associated prolonged cord separation time.

Conclusion: The authors recommend the continued use of antimicrobials in umbilical cord care until such time that evidence based research guides practice.

www.medscape.com/viewarticle/497030_print

STD Corner

Lori de Ravello, National IHS STD Program

Daily suppressive therapy is recommended for HSV-2 seropositive individuals

FINDINGS: An estimated 45 million persons in the United States have genital herpes infection, and new infections occur at a rate of approximately one million per year. Approximately 85% to 90% of infections are unrecognized and therefore undiagnosed. Individuals with genital HSV-2 infection shed virus during asymptomatic periods as well as symptomatic periods. In fact, transmission frequently occurs during periods of asymptomatic viral shedding. Asymptomatic viral shedding (1) occurs in the majority of patients with genital HSV-2 infection; (2) accounts for approximately one third of the days of viral shedding; (3) occurs regardless of duration of infection but is most frequent during the first year after infection; (4) occurs more than 7 days before or after a symptomatic recurrence 50% of the time; and (5) does not differ significantly when comparing patients with 1 to 12 annual recurrences to those with no recurrences. A recently published study of discordant couples counseled on safe sex practices found that once daily suppressive therapy with valacyclovir reduced the risk of transmission of HSV-2 in heterosexual immunocompetent adult couples discordant for HSV-2 infection. In an 8-month study, daily valacyclovir compared with placebo reduced the risk of acquisition of symptomatic genital HSV-2 infection by 75% (2.2% placebo vs. 0.5% valacyclovir; hazard ratio = 0.25; p = 0.008). The overall risk of acquisition of HSV-2 infection (defined via laboratory-confirmed symptoms or seroconversion) was reduced by 48% (3.6% placebo vs. 1.9% valacyclovir hazard ratio = 0.52; p = 0.04). The most common adverse events in the study were headache, nasopharyngitis, and upper respiratory infection.

CONCLUSION: Daily suppressive therapy is recommended as a therapeutic option for HSV-2 seropositive individuals at risk of transmitting HSV-2. Because no intervention completely protects against transmission of HSV, infected individuals and their partners should be counseled to use safer sex practices, including the use of condoms.

Leone P Reducing the risk of transmitting genital herpes: advances in understanding and therapy. Curr Med Res Opin. 2005 Oct;21(10):1577-82.

HIV—Grade A recommendation: Screen high risk adolescents/adults, plus all pregnant

The United States Preventive Services Task Force (USPSTF) continues to recommend screening all adolescents and adults at high risk for HIV and now also recommends screening all pregnant women. The guidelines, updated since 1996, make no recommendations for or against screening adolescents and non-pregnant adults not at high risk.

Grade A recommendation: The U.S. Preventive Services Task Force (USPSTF) strongly recommends that clinicians screen for HIV all adolescents and adults at increased risk for HIV infection.

www.annals.org/cgi/content/full/143/1/32

Dexamethasone treatment does not improve the outcome of women with HELLP syndrome

Conclusion: The results of this investigation do not support the use of dexamethasone for treatment of HELLP syndrome.

Fonseca JE, et al Dexamethasone treatment does not improve the outcome of women with HELLP syndrome: a double-blind, placebo-controlled, randomized clinical trial. Am J Obstet Gynecol. 2005 Nov;193(5):1591-8.

AHRQ

AHRQ Releases Updated Guide to Clinical Preventive Services

The Agency for Healthcare Research and Quality (AHRQ) has published an updated version of evidence-based clinical guidelines from the U.S. Preventive Services Task Force (USPSTF). The Guide to Clinical Preventive Services 2005 includes the USPSTF's recommendations on prevention and early detection of cancer; heart and vascular diseases; infectious diseases; injury and violence; mental health conditions and substance abuse; metabolic, nutritional, and endocrinologic conditions; musculoskeletal conditions; and obstetric and gynecologic conditions.

Go to: **www.ahrq.gov/clinic/pocketgd.htm** or call the AHRQ Publications Clearinghouse at (800) 358-9295.

Oklahoma Perspective

Greggory Woitte—Hastings Indian Medical Center

Shoulder dystocia

It is one of an obstetrical provider's worst nightmares. Being in attendance when a true shoulder dystocia is identified can be traumatic to the obstetrical personnel as well as the patient and her family. Having personally just experienced this obstetrical emergency, I thought that it could become educational. First we all know that should dystocia is an unpredictable event. There are factors that are suggestive of the possibility and every obstetrical provider should be aware of these risk factors. Two important risk factors that our patients often have are macrosomia and diabetes. It well documented that as the fetal weight increases, the risk of shoulder dystocia increases. However, 50-60% of shoulder dystocias occur at a fetal weight less than 4000 g. Early induction for macrosomia does not decrease the number of shoulder dystocias and in fact increases the number of cesarean deliveries.

Despite having knowledge of the risk factors, shoulder dystocia is unpredictable. Therefore, ALL obstetrical providers should be familiar with the steps to alleviate a dystocia. Being prepared when risk factors are identified will help, however, ensuring that you have a plan to handle a shoulder dystocia with EVERY delivery is a requirement to practice obstetrics.

OB/GYN CCC Editorial comment:

I highly recommend that all staff who provide care for pregnant women in Indian Country attend and keep current with the Advanced Life Support in Obstetrics (ALSO) Provider Course. The skills based learning would be ideal for the entire L/D team at your facility, or even if you provide just emergency delivery services.

It is most helpful if all staff can take the ALSO Provider Course so we are all working with the same set of expectations. We recently had 3 ALSO Courses in the Navajo Area and routinely have courses 1-2 times a year in the Alaska Area. ALSO website for other availability, below

In the meantime, we have just released a new module on our MCH web page about Shoulder Dystocia. You can use the module for free CMEs/CEUs, or use just as a great resource.

Shoulder dystocia—Indian Health CME/CEU module
www.ihs.gov/MedicalPrograms/MCH/M/shdyst.cfm

Midwives Corner

Eating Fish During Pregnancy Boosts Baby's Brainpower

Visual recognition memory scores were highest among infants of women who consumed > 2 weekly fish servings but had mercury levels </= 1.2 ppm. Higher fish consumption in pregnancy was associated with better infant cognition, but higher mercury levels were associated with lower cognition. Women should continue to eat fish during pregnancy but choose varieties with lower mercury contamination.

Oken E, et al Maternal fish consumption, hair mercury, and infant cognition in a U.S. Cohort. Environ Health Perspect. 2005 Oct;113(10):1376-80.

Osteoporosis

Estrogen supplementation may be protective of BMD in adolescents who use DMPA

Estrogen supplementation may be protective of bone mineral density in adolescents who use DMPA injections for contraception. They add that further research needs to be performed to address the recovery of bone mineral density after discontinuing DMPA in adolescents; they also suggest evaluating the impact diet and exercise may have on this recovery. Long-term use of depot medroxyprogesterone acetate (DMPA) has been shown to have a negative impact on bone mineral density, and there is some concern that this loss may not be completely reversible after discontinuing the drug. This concern has led the U.S. Food and Drug Administration to recommend that a black box warning be added to the drug information. The warning states that DMPA contraceptive injection should be used long term (longer than two years) only in women in whom other birth control methods are inadequate. This study demonstrates that the addition of estrogen to DMPA may reduce the negative impact on bone mineral density

Cromer BA, et al. Double-blinded randomized controlled trial of estrogen supplementation in adolescent girls who receive depot medroxyprogesterone acetate for contraception. Am J Obstet Gynecol January 2005;192:42-7.

(Gardasil, continued from page 5)

OB/GYN CCC Editorial

The following are comments from Medscape and Mark H. Stoler, MD, FASCP*.

MEDSCAPE: What are the strengths and limitations of this study?

DR. STOLER: The strengths are clearly the size; this is a multicenter, multidemographic study, double-blinded and placebo-controlled, and it uses a very concrete, pathology-defined end point, such that you are measuring clinical efficacy based on the presence or absence of clinical disease, not just the presence or absence of viral DNA. The study really doesn't have any weaknesses except that we don't know the long-term efficacy. We only have interim analysis data in this very large population, although these patients will be followed for a very long period of time. Whether people will need booster shots will be clarified as time goes on.

MEDSCAPE: How long was follow-up continued, and how will the potential for complications in the longer term, such as effects on autoimmunity, neoplasia, fertility and/or teratogenicity, be addressed?

DR. STOLER: Some of those types of concerns are less relevant to this type of vaccine than they are in, for instance, a drug study. These patients are being monitored for all those potential effects, and so far, there's not even a suggestion of any significant adverse effect related to the vaccine. Merck plans to take Gardasil to the Food and Drug Administration probably within a year, and I believe these patients will be followed for a minimum of five years, and at least a subset of them are going to be followed very long term. The natural history of cervical cancer is 10 to 20 years from infection and acquisition of HPV to development of cancer, so these patients will have to be followed for a very long time.

STAY TUNED: The CCC Corner will publish some of Dr. Alan Waxman's thoughts on this study next month.

**Trial investigator Mark H. Stoler, MD, FASCP, a professor of pathology and clinical gynecology and associate director of surgical pathology and cytology at the University of Virginia Health System in Charlottesville. He is also secretary of the board of directors of the American Society for Clinical Pathology.*

Cervical Cancer

An estimated 10,370 women in the USA will be diagnosed with cervical cancer in 2005, and 3,710 are expected to die.

By age group, a woman's risk of developing the cervical cancer:

Birth to 39:	1 in 636
40 to 59:	1 in 340
60 to 79:	1 in 368
Lifetime:	1 in 130

Source: American Cancer Society, Cancer Facts & Figures 2005

(pre-eclampsia…, continued from page 1)

case of eclampsia (Sabia 2004). For this reason, some experts have recommended against anticonvulsant therapy in women with mild disease in Western countries (Sabai 2004, Sabai 2005).

The evidence regarding the benefit to risk ratio of magnesium sulfate prophyalaxis in mild pre-eclampsia remains uncertain and does not justify its routine use for that purpose. (Sabai 2004) The American College of Obstetricians and Gynecologists recommends use of magnesium sulfate in women with severe preeclampsia and acknowledges the lack of consensus as to whether mildly preeclamptic women require such treatment to prevent seizures in a small number of patients (0.5 percent).

The incidence of seizures is much lower (about 0.1 percent) in women with nonproteinuric hypertension (Coetzee 1998). For this reason, it may be safe to withhold seizure prophylaxis in such women.

Resources:

Altman D; Carroli G; Duley L; Farrell B; Moodley J; Neilson J; Smith D Do women with pre-eclampsia, and their babies, benefit from magnesium sulphate? The Magpie Trial: a randomised placebo-controlled trial. Lancet 2002 Jun 1;359(9321):1877-90.

Sibai BM Magnesium sulfate prophylaxis in preeclampsia: Lessons learned from recent trials. Am J Obstet Gynecol 2004 Jun;190(6):1520-6.

American College of Obstetricians and Gynecologists. Diagnosis and management of preeclampsia and eclampsia. ACOG practice bulletin #33. Obstet Gynecol 2002; 99:159.

Coetzee EJ; Dommisse J; Anthony J A randomised controlled trial of intravenous magnesium sulphate versus placebo in the management of women with severe pre-eclampsia. Br J Obstet Gynaecol 1998 Mar;105(3):300-3.

Child Health

Do Pacifiers Reduce the Risk of Sudden Infant Death Syndrome? A Meta-Analysis

This review article found that several studies show a significant reduced risk of SIDS with pacifier use, particularly when used during sleep.

www.aap.org/ncepr/sidsarticle.pdf

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

- Evidence does not justify routine use: Magnesium sulfate for mild pre-eclampsia

IHS Child Health Notes

- A developmental model for rural telepsychiatry
- Hepatitis B Infection and Vaccine—Who is still at risk? Is it time to boost yet?
- The Impact of Medicaid Reform on Indian Health Programs

From Your Colleagues

- Carolyn Aoyama, HQE—Excess Cervical Cancer Mortality: Marker for Low Access to Health Care in Poor
- Richard Olson, HQE—Medical Staff Credentialing and Privileging Guide, 3rd Edition: Now available
- Judy Thierry, HQE—We would like to hear from people—Diabetes in pregnancy

Hot Topics

- First trimester combined screening better than 2nd trimester quadruple screening NEJM
- Vaccine prevents cervical cancer, Gardasil: Preliminary results 100% effective
- Advanced skills practitioner not needed at uncomplicated elective cesarean delivery
- Beyond Red Lake—The persistent crisis in American Indian Health Care

Features

- ACOG—Compounded Bioidentical Hormones
- Ask a Librarian—All clinicians involved with Indian Health are now invited: Tribal, urban, IHS
- Breastfeeding—The breastfeeding mother is physiologically different
- Alaska State Diabetes Program—Big Babies at Risk of Obesity Later in Life
- Medical Mystery Tour—The HCG curve has been redefined. Now what?
- Perinatology Picks—Medical Management of Early Pregnancy Failure