NATIONAL COUNCIL OF CHIEF CLINICAL CONSULTANTS

CCC CORNER

Focus on the Health of American Indians and Alaska Natives

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Group Prenatal Care...

Improves Pregnancy Outcomes at No Additional Cost

OBJECTIVE: To determine whether group prenatal care improves pregnancy outcomes, psychosocial function, and patient satisfaction and to examine potential cost differences.

Methods: A multisite randomized controlled trial was conducted at two university-affiliated hospital prenatal clinics. Pregnant women aged 14-25 years (n=1,047) were randomly assigned to either standard or group care. Women with medical conditions requiring individualized care were excluded from randomization. Group participants received care in a group setting with women having the same expected delivery month. Timing and content of visits followed obstetric guidelines from week 18 through delivery. Each 2-hour prenatal care session included physical assessment, education and skills building, and support through facilitated group discussion. Structured interviews were conducted at study entry, during the third trimester, and postpartum.

RESULTS: Mean age of participants was 20.4 years; 80% were African American. Using intent-to-treat analyses, women assigned to group care were significantly less likely to have preterm births compared with those in standard care: 9.8% compared with 13.8%, with no differences in age, parity, education, or income between study conditions. This is equivalent to a risk reduction of 33% (odds ratio 0.67, 95% confidence interval 0.44-0.99, P=.045), or 40 per 1,000 births. Effects were strengthened for African-American women: 10.0% compared with 15.8% (odds ratio 0.59, 95% confidence interval 0.38-0.92, P=.02). Women in group sessions were less likely to have suboptimal prenatal care (P<.01), had significantly better prenatal knowledge (P<.001), felt more ready for labor and delivery (P<.001), and had greater satisfaction with care (P<.001). Breastfeeding initiation was higher in group care: 66.5% compared with 54.6%, P<.001. There were no differences in birth weight nor in costs associated with prenatal care or delivery.

Conclusion: Group prenatal care resulted in equal or improved perinatal outcomes at no added cost.

LEVEL OF EVIDENCE: I

ickovics JR, et al Group prenatal care and perinatal outcomes: a randomized controlled trial. Obstet Gynecol. 2007 Aug;110(2 Pt 1):330-9

National MCH Coordinator Editorial comment:

CenteringPregnancy in the Indian Health system

I want to acknowledge the 30 participants who attended the CenteringPregnancy group prenatal care training held August 13 and 14th in Albuquerque. The training provided the fundamentals and the experience of this new model of care. The August 15 to 17 Native Women's Health and Maternity Care Conference, "Improve the System, Improve the Outcome" provided a 1 hour workshop experience on CenteringPregnancy lead by IHS facilities engaged in group prenatal care. Expect an article from the sites already involved in Centering shortly in an upcoming CCC Corner.

The web site is complete with information on research, trainings, background materials and conferences on Centering. http://www.centeringpregnancy.org

A model of Centering Parenting is underway, encouraged by prenatal clients and their families across the US.

For site specific activities and training questions please contact me judith.thierry@ihs.gov or Joel Rosen joel.rosen@ihs.gov

To subscribe to an IHS CenteringPregnancy list serve paste this link into your browser: http://www.ihs.gov/cio/listserver/index.cfm?module=list&option=list&num=80&startrow=1

THIS MONTH

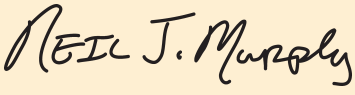
Once you get our sand in your shoes, you return

Marie A. Swigert, RN MS is one of those nurses who started as a staff nurse in the hospital prior to becoming the Director of Community Health Nursing for the State of Colorado. Along the way she stopped at Northern Navajo Medical Center. The Nurses Corner by Kendra Carter, page 14, has Marie's stories about MCH within the IHS.

An elder Navajo said 'once you get our sand in your shoes, you return'. If you know other veteran Indian Health colleagues like Marie Swigert, the CCC Corner would love to share their stories. Those who don't know history were bound to repeat it.

Also on-line....

Subscribe to the listserv and receive reminders about this service. If you have any questions, please contact me at nmurphy@scf.cc



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

IHS Child Health Notes

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

Quote of the month

"Nothing significant will ever be accomplished if all possible objections must be dealt with beforehand."
—Winston Churchill

Articles of Interest

A randomized, controlled trial of a removable brace versus casting in children with low-risk ankle fractures.

Pediatrics. 2007 Jun;119(6):e1256-63

Recent studies have shown that casting may not be necessary for some common childhood fractures such as buckle fractures of the wrist. A recent double blinded randomized controlled study in Canada looked at treatment of low risk distal fibular fractures. They compared the standard treatment of 4 weeks in a fiberglass walking cast with a removable air stirrup ankle brace.

At 4 weeks post-injury the children with the ankle brace more likely to have returned to regular activities. These children were more likely to have been "very happy" with their treatment and had fewer unscheduled return visits for complications. The cost of ankle bracing was also lower.

Editorial Comment

This study is particularly helpful for IHS and tribal sites which are often rural, remote and do no have ready access to orthopedic specialty care. These low risk fibular fractures, like low risk wrist fractures, can be treated with bracing in a primary care clinic. Patients get better faster, with less complications of casting and costs are minimized.

Article of Interest

Superhero-related injuries in paediatrics: a case series
Patrick Davies, Julia Surridge, Laura Hole, and Lisa Munro-Davies

Arch Dis Child 2007; 92: 242-243. doi:10.1136/adc.2006.109793

The authors describe five patients between the ages of 3 and 8 years of age who sustained serious injuries while dressed up as superheroes (4 Spiderman, 1 Superman). They speculate that the wearing of full costumes may have led children to believe their own powers had been given a super boost. The authors, all British, describe, how "all were injured after initiating flight without having planned for landing strategies".

The authors also point out that all of the injured were boys. Commercial role models for girls are less likely to show risk taking behaviors: there are no known instances of "My Little Pony" related injuries.

Infectious Disease Updates

Rosalyn Singleton, MD, MPH

Influenza Vaccination for 2007-8

- Influenza disease Predictions for 2007-8:
  - Some experts are predicting that the 2007-8 Flu season could be the worst in years. Australia is facing its worst influenza season since 2003 and it's possible the U.S. may expect the similar pattern after two mild seasons.
- IHS Childhood Influenza Immunization Rates, 2006-7
  - In the IHS 3rd Quarter Immunization Report, among 9 reporting IHS Areas, 55% (range 14% to 65%) of 6-23 month old children received at least 1 influenza vaccine during the 2006-7 season.
- Influenza vaccine Recommendations 2007-8 (http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5606a1.htm)
  - Routine vaccination of 6-59 month olds
  - Importance of 2 doses for children 6mo-8 yrs being vaccinated the first time
  - NEW! Children 6mo-8yrs who received only 1 dose in their first year of vaccination should receive 2 doses the 2nd year they are vaccinated
  - Vaccination of household contacts and caregivers of children birth-59 months old.
  - Timing of Influenza vaccine: Early October through March
  - National Influenza Vaccination week is November 26 – December 2nd.
- Inactivated Influenza (TIV) Vaccine Products:

Vaccine	Package	Dose	Age	Thimerosal
Fluzone (Sanofi)	Multidose	Age-dependent	>6 mos	Yes
	Single dose syringe	0.25 mL	6-35 mos	No
	Single dose syringe	0.5 mL	>36 mos	No
	Single dose vial	0.5 mL	>36 mos	No
Fluvirin (Novartis)	Multidose vial	0.5 mL	>4 yrs	Yes
Fluarix (GSK)	Single dose syringe	0.5 mL	>18 yrs	Trace
Flulaval (GSK	Multi-dose vial	0.5 mL	>18 yrs	Yes

- Live attenuated Influenza Vaccine (LAIV):
  - New refrigerated (NOT FROZEN) formulation this season
  - Approved only for 5-49 year old healthy persons – Medimmune is applying for expansion of the licensure down to 1-2 years of age. Should hear soon!
- Flu Vaccine Supply predictions:
  - So far there are no predictions of vaccine shortages or delays.
  - National Foundation of Infectious Disease planning a press conference Sept 19th

CCC Corner Oct 2007

Recent literature on American Indian/Alaskan Native Health

Doug Esposito, MD

Article

Barry, M. The tail end of guinea worm – global eradication without a drug or a vaccine. New Engl J Med. 2007;365(25): 2561-4.

Editorial Comment

So, how does an article on the global eradication of dracunculiasis, or guinea worm, relate to American Indian/Alaska Native Child Health? Please read on to find out!

As most of you are aware, dracunculiasis is likely to become only the second human disease in history to be eradicated from the face of the planet through human intervention; the first, of course, being small pox. From an estimated 3.5 million cases in 1986 to a few over 25,000 cases in 2006, and from 20 countries with endemic disease down to just 9 in the same period (five of which reported fewer than 30 cases each), guinea worm is taking its last gasp (hmm...do those little guys actually breath?). What is so remarkable about this achievement, though, is that this progress has been made without drugs or vaccines, and for a total estimated cost of around $250 million. The progress made to date has almost entirely been accomplished through a grass-roots public health movement and generalized changes in behavior of populations. "Its demise will be proof that people can be persuaded to change their behavior through innovative health education."

I will refer the reader to the article itself to review the specific details of the dracunculiasis eradication effort and not repeat them here. The point that I would like to make is that it really is possible to change behavior on a population level, as evidenced by this incredible achievement.

So why then is greater progress on such issues as obesity, diabetes, and motor vehicle related morbidity and mortality so elusive? I suppose we just haven't yet managed to get it right! The medical and public health communities have not been able to make sufficient inroads into the consciousness of the population as a whole or to counter the significant social, political, and corporate forces that stand in opposition to positive change. As such, a sufficient societal response to these problems in the form of broad behavioral change has not yet been achieved.

One might argue that the afflictions of the developed world are somehow just a little more complex than a simple endemic helminthic infestation of the developing world; that the interplay between health behaviors and societal, political, and corporate forces are somehow more intricate in the U.S. (please see the article in "Additional Reading" below for a fascinating example of just one aspect of that complexity in our own society). Yes, obesity is a difficult issue with complex and powerful modulating forces at work. But no matter how simple the process of collecting clean water in the developing world might seem, it is an incredibly complex process that is subject in my opinion to many of the same forces that have led to overeating, poor physical activity, and low passenger restraint use rates in our world.

As overwhelming as health problems like obesity, diabetes, and injury are, I for one take heart in knowing that successes like the impending guinea worm eradication are possible, without drugs, immunizations, complex technologies, or mega-bucks! Population-level behaviors that result in disease and illness CAN be changed. The impossible really is possible! I guess the bottom line is that we will just have to keep trying until we get it right. We will get there, hopefully sooner rather than later.

Additional Reading

Jones MM, Bayer R. Paternalism and its discontents: motorcycle helmet laws, libertarian values, and public health. Am J Public Health. 2007 Feb;97(2):208-17.

Article

Brugge D, Delemos JL, Bui C. The Sequoyah Corporation fuels incident and the Church Rock spill: unpublicized nuclear releases in American Indian communities. Am J Public Health. 2007;97(9): 30-5.

Editorial Comment

This is an interesting article about two significant accidental nuclear releases into the environment that occurred in two American Indian communities and the possible reasons why these events never really received much interest or mention in the press or the scientific literature. In fact, I had never really heard of either, despite the fact that the largest of the two incidents (the Church Rock, NM incident was more than three times larger in terms of estimated curies of radiation release than the infamous Three Mile Island incident!) occurred less than 45 miles from where I now reside! The authors contend that the reason so little interest has been paid to these two incidents might have something to do with their having occurred in rural, low-income, American Indian communities. I would suggest reading this interesting article and deciding for yourself.

Announcements from the AAP Indian Health Special Interest Group

Sunnah Kim, MS

Locums Tenens and Job Opportunities

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

From Your Colleagues

Craig Vanderwagen

Assistant Secretary for Preparedness and Response

Rebuilding Iraq one step at a time: You can be part of the solution

I have become a member of the editorial board for an English language medical journal being published in Iraq through the Ministry of Health called the New Iraqi Journal of Medicine. It is primarily managed by faculty from the Baghdad College of Medicine. It is a listed referreed journal (ISN 1817-5562) that follows the international conventions on referreed journals. They are striving to achieve a high quality product. I am most supportive because the medical community there has been decimated and needs revitalization.

I am wondering if our colleagues in Indian Health would be interested in submitting articles for this publication. As you can imagine primary care in general and the care of women and children are critical needs with infant mortality exceeding 125/1000 and maternal mortality exceeding 200/100,000….we know this in Indian Health better than anyone and I think that our experience would be most informative…over half of deliveries are outside the hospital and our insights would be useful.

The latest version of the Journal is available (my e-mail address is below) with Instructions to Authors. The Journal publishes articles on a wide variety of topics. The Editorial Board have asked me to solicit information from our experience in Indian Country and in other settings. I will also be attempting to encourage folks from Indonesia to offer some articles for instance and some of my Canadian colleagues as well.

Contributions from IHS would be most helpful both for nurturing the science and best practices, but our experience in applying these principles in a low cost and often challenging environment would be instructive.

OB/GYN CCC Editorial

Update on Dr. Vanderwagen

After serving in many helpful roles in the Indian Health system, RADM W.C. Vanderwagen, M.D.. is currently the Assistant Secretary for Preparedness and Response for HHS. He has the responsibility for development of medical countermeasures (e.g. Pan flu vaccines, anthrax anti-toxins, new lower cost ventilators) as well as the leadership for all federal assets (including VA and DOD) in any medical or public health emergency (natural or manmade). This role includes leadership in international preparedness and response activities in partnership with our international colleagues.

His connection with the Iraqis goes back to 2003 and 2004 when he was working in Iraq with them to try to stand up and strengthen the civilian health system. It has been a very difficult transition for our medical colleagues, just half a world away. Now some of the younger Iraqi physicians are trying to get back in control and create a science oriented culture to health services rather than a purely political entity. in the Ministry of Health. Dr. Vanderwagen is asking for your help in the transition to stability which will help our neighbors.

A copy of the Journal, with Instructions to Authors, is available upon request

William.Vanderwagen@HHS.GOV

Roberta Ward, ANMC

First trimester screening for Down Syndrome

What is the combined test?

The "combined test" is a combination of an ultrasound measurement of the baby, plus a test for two chemicals that come from the baby and found in your blood. This "combined test" is done at a very specific time—11 to 13 weeks of pregnancy. The test looks for chromosome problems in the baby, especially Down Syndrome. It is done earlier than other testing, is more accurate, and has fewer false positive results.

What is down syndrome?

Down Syndrome is a condition in children caused by an extra chromosome. Chromosomes are found in all the baby's cells and are like "blue-prints" that direct how the baby's whole body is formed. Babies with Down Syndrome have an extra chromosome #21. As a result of this "extra message," the baby may be born with several problems, including learning disabilities, special facial features, heart defects, frequent infections and other special needs.

Who should have this test for down syndrome?

Women older than age 35 are more likely to have a baby with Down Syndrome, however, women of any age can have such a child. At age 35, a woman has a 1:300 chance of having a baby with Down Syndrome. A 40 year old woman has a 1:100 chance, and a 45 year old woman has about a 1:10 chance. You need to decide if having this test is right for you.

How is the test done?

Between 11 and 13 weeks a special ultrasound measurement is made of the back of the baby's neck. Babies with Down Syndrome will often have a thickened area behind the neck. Blood will also be taken from your finger and checked for the amount of the two chemicals that pass from the baby to you. Babies with Down Syndrome usually have one of these chemicals too high, or the other too low. The laboratory will combine these three measurements to give you your risk of having a baby with Down Syndrome.

If the test comes out positive, does it mean my baby has down syndrome?

No, this is just a screening test. If your test results are positive, further testing may be needed. Your prenatal care provider will explain this to you if your test shows you may have an increased risk.

Questions: rlward@scf.cc**, Alaska Native Medical Center**

Hot Topics

Obstetrics

Do Unsutured Second-Degree Perineal Lacerations Affect Postpartum Outcomes?

Methods: A prospective cohort of nurse-midwifery patients consented to mapping of genital trauma at birth and an assessment of postpartum pelvic floor outcomes. Women completed validated questionnaires for perineal pain and urinary and anal incontinence at 12 weeks postpartum and underwent physical examination to assess pelvic floor strength and anatomy at 6 weeks postpartum.

Conclusions: Women with sutured lacerations report increased analgesic use at the time of hospital discharge compared with women with intact perineums or unsutured lacerations. At 12 weeks postpartum, no differences were noted between groups regarding complaints of urinary or anal incontinence, sexual inactivity, or sexual function.

Leeman LM et al Do Unsutured Second-Degree Perineal Lacerations Affect Postpartum Functional Outcomes? The Journal of the American Board of Family Medicine 20 (5): 451-457 (2007)

Treating Gestational Diabetes May Reduce Childhood Obesity

The risk of childhood obesity in offspring of mothers with GDM by NDDG criteria (treated) was attenuated compared with the risks for the groups with lesser degrees of hyperglycemia (untreated).

Conclusions: Our results in a multiethnic U.S. population suggest that increasing hyperglycemia in pregnancy is associated with an increased risk of childhood obesity. More research is needed to determine whether treatment of GDM may be a modifiable risk factor for childhood obesity.

Hillier TA, et al Childhood obesity and metabolic imprinting: the ongoing effects of maternal hyperglycemia. Diabetes Care. 2007 Sep;30(9):2287-92.

Gynecology

Cervical cancer differences disappear in rural women after controling for poverty and race

Conclusion: Rural women in the United States have higher cervical cancer incidence rates. Among older women (aged 45-80 years) in whom half of cervical cancers occur, geographic differences largely disappear after controlling for poverty and race.

Level Of Evidence: Iii.

Benard VB, et al Cervical cancer incidence in the United States by area of residence, 1998 2001. Obstet Gynecol. 2007 Sep;110(3):681-6

Cochrane Update: Improvements in outcome with subtotal hysterectomy not confirmed

Authors' Conclusions: This review has not confirmed the perception that subtotal hysterectomy offers improved outcomes for sexual, urinary, or bowel function when compared with total abdominal hysterectomy. Surgery is shorter and intraoperative blood loss and fever are reduced, but women are more likely to experience ongoing cyclical bleeding up to a year after surgery with subtotal hysterectomy compared with total hysterectomy.

Neilson JP. Total versus subtotal hysterectomy for benign gynaecological conditions Obstet Gynecol. 2007 Sep;110(3):705-6.

Child Health

How to improve psychosocial problems at well child care visits?

This study demonstrates the feasibility and effectiveness of addressing multiple family psychosocial problems during WCC [well child care] visits for low-income children.

The authors found that

* The mean number of family psychosocial topics discussed at the WCC visit was significantly higher for parents in the intervention group vs. the control group (2.9 vs. 1.8).

The authors believe that the WE CARE intervention can serve as a model for addressing family psychosocial problems for medical homes that care for low-income children. Additional research will be needed to assess the long-term impact of family psychosocial screening interventions on parental outcomes and child health, behavioral, and developmental outcomes.

Garg A, Butz AM, Dworkin P, et al. 2007. Improving the management of family psychosocial problems at low-income children's well-child care visits: The WE CARE project. Pediatrics 120(3):547-588.

Is Ibuprofen Appropriate for Pain Control in Children?

Conclusion: Ibuprofen provided superior pain relief compared with codeine and acetaminophen, especially in children with fracture-related pain, but only 52 percent of the children received adequate pain relief. Additional measures, such as ice or distraction, should be sought to help alleviate acute musculoskeletal pain. When used alone, ibuprofen is not an adequate analgesic in all children with musculoskeletal injuries.

Clark E, et al. A randomized, controlled trial of acetaminophen, ibuprofen, and codeine for acute pain relief in children with musculoskeletal trauma. Pediatrics March 2007;119:460-7.

Chronic disease and Illness

Why Hasn't This Patient Been Screened for Colon Cancer?

Results: Reasons patients were not up to date fell into 2 major categories: (1) no discussion by physician (50%) and (2) patient refusal (43%). Reasons for no discussion included lack of opportunity, assessment that cost would be prohibitive, distraction by other life issues/health problems, physician forgetfulness, and expected patient refusal.

(continued on page 15)

Features

ACOG, American College of Obstetricians and Gynecologists

Pelvic Organ Prolapse

Summary of Recommendations and Conclusions

The following recommendations and conclusions are based on good and consistent scientific evidence (Level A):

- The only symptom specific to prolapse is the awareness of a vaginal bulge or protrusion. For all other pelvic symptoms, resolution with prolapse treatment cannot be assumed.
- Pessaries can be fitted in most women with prolapse, regardless of prolapse stage or site of predominant prolapse.
- Cadaveric fascia should not be used as graft material for abdominal sacral colpopexy because of a substantially higher risk of recurrent prolapse than with synthetic mesh.
- Stress-continent women with positive stress test results (prolapse reduced) are at higher risk for developing postoperative stress incontinence after prolapse repair alone compared with women with negative stress test results (prolapse reduced).
- For stress-continent women planning abdominal sacral colpopexy, regardless of the results of preoperative stress testing, the addition of the Burch procedure substantially reduces the likelihood of postoperative stress incontinence without increasing urgency symptoms or obstructed voiding.
- For women with positive prolapse reduction stress test results who are planning vaginal prolapse repair, TVT midurethral sling (rather than suburethral fascial plication) appears to offer better prevention from postoperative stress incontinence.

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

- Clinicians should discuss the option of pessary use with all women who have prolapse that warrants treatment based on symptoms. In particular, pessary use should be considered before surgical intervention in women with symptomatic prolapse.
- Alternative operations for uterine preservation in women with prolapse include uterosacral or sacrospinous ligament fixation by the vaginal approach, or sacral hysteropexy by the abdominal approach.
- Hysteropexy should not be performed by using the ventral abdominal wall for support because of the high risk for recurrent prolapse, particularly enter-ocele.
- Round ligament suspension is not effective in treating uterine or vaginal prolapse.
- Compared with vaginal sacrospinous ligament fixation, abdominal sacral colpopexy has less apical failure and less postoperative dyspareunia and stress incontinence, but is also associated with more complications.
- Transvaginal posterior colporrhaphy is recommended over transanal repair for posterior vaginal prolapse.

The following recommendations are based primarily on consensus and expert opinion (Level C):

- Clinicians should discuss with women the potential risks and benefits in performing a prophylactic antiincontinence procedure at the time of prolapse repair.
- Women with prolapse who are asymptomatic or mildly symptomatic can be observed at regular intervals, unless new bothersome symptoms develop.
- For women who are at high risk for complications with reconstructive procedures and who no longer desire vaginal intercourse, colpocleisis can be offered.
- Cystoscopy should be performed intraoperatively to assess for bladder or ureteral damage after all prolapse or incontinence procedures during which the bladder or ureters may be at risk of injury.

Pelvic Organ Prolapse. ACOG Practice Bulletin No. 85. American College of Obstetricians and Gynecologists. Obstet Gynecol 2007; 110:717-29.

Management of Delivery of a Newborn With Meconium-Stained Amniotic Fluid

Abstract: In accordance with the new guidelines from the American Academy of Pediatrics and the American Heart Association, all infants with meconium-stained amniotic fluid should no longer routinely receive intrapartum suctioning. If meconium is present and the newborn is depressed, the clinician should intubate the trachea and suction meconium and other aspirated material from beneath the glottis.

Management of Delivery of a Newborn With Meconium-Stained Amniotic Fluid. ACOG Committee Opinion No. 379. American College of Obstetricians and Gynecologists. Obstet Gynecol 2007;110:73

Ask a Librarian

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

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Breastfeeding

Suzan Murphy, PIMC

A pacifier by any other name….*

Pacifiers have been around for a long time. A painting by Dureer in 1506 shows a baby with a homemade pacifier. Historians describe "sugar -teats" used in the 1800's as being pieces of cloth tied around about a tablespoon of sugar or pieces of cloth soaked in honey. Today the choices are many – from utilitarian plastic to "orthodontic" to on-line jeweled designer styles with coordinating clips for obvious bling.

Pacifiers have helped many new families survive otherwise sleepless nights and endless car rides. They have been praised, condemned, associated with a variety of health issues, and most recently reduced risk of SIDs. Among the thoughts about pacifiers and how they reduce SIDs risk is that using a sleep/nap time pacifier may prevent a baby from rolling from a safer back to sleep position to the riskier side or tummy sleeping position. Another possibility is that intermittent sleep time sucking may help keep baby in a less risky arousal zone of sleep.

But what impact do pacifiers have on breastfeeding? Numerous studies have been done, most showing that regular use of pacifiers, especially in the early weeks and months, is associated with reduced duration. Speculations for how pacifiers disrupt lactation are that pacifiers:

- Reinforce ineffective sucking habits that reduce milk intake and lead to sore nipples
- Reduce of the baby's "practice time" needed to strengthen the facial/oral cavity muscles that are necessary for effective nutritive suckling,
- Encourage the loss of the stimulation/instinctual response by the baby to pull the maternal nipple into the mouth. (the pacifier/nipple rubs the roof of the mouth, stimulating the suck, rather than the baby instinctually responding or remembering the need to suck the nipple in)

But not every breastfeeding baby is affected negatively by pacifiers. So, what can a provider tell a new family? Unfortunately there are no absolute answers, although avoiding pacifier use in the first several months is generally safer for supporting successful breastfeeding. Consider these possible scenarios:

1. At a 2 week newborn check, an exclusively breastfed baby is a few ounces below birth weight. Mom states that when the baby nurses it sometimes feels like "chomping at the breast" and the baby wants to linger at nursing, taking 45 minutes or more every couple hours. The baby has 5, maybe 6 diaper changes in 24 hours. They use a pacifier routinely. It will help to:
   - Encourage the family to avoid using the pacifier for a while (4 or more weeks if possible). As the baby practices and gets better at nursing, the eating time will get shorter and the baby will go longer in between feeds. The baby will get more calories "practicing" too.
   - Watch the baby nurse – apply firm, steady, finger-tip pressure to the bottom of the baby's chin through several suck cycles – it will help to nudge the baby's jaw open for a deeper latch and assure that the baby's bottom lip is "popped" out and that the baby's tongue is now covering the gum line to more effectively milk the nipple. The baby will get more to eat without hurting mom. Everyone will be happier.
   - If short-term supplementation is needed, consider supplementing at the breast. This can be done by filling a syringe with formula or breast milk and attaching a 5 french feeding tube to the syringe. Then slip the end of the tube into the side of the baby's mouth, as the baby is latched and sucking. Gently tap the syringe plunger to keep the supplement seeping into the feeding. It may be easier to use a smaller syringe and supplement on each side rather than a large, cumbersome syringe on one side. Or - it might be more effective to offer the bulk of the supplement at the end of the feeding, on the 2nd side. Use what is most comfortable for mom.
   - It is ok to remind parents that talking to their baby and cuddling can be soothing, for everyone.
2. A family comes in for the one month well baby check. The baby has gained 2 pounds above birth weight. Parents are beyond exhausted. They describe constant nursing (every hour), 14 or more diaper changes in 24 hours, etc. This baby may have an overly abundant need to suck. Careful

CCC Corner Oct 2007

Perinatology Corner

Positive association between hyperemesis gravidarum and Helicobacter pylori infection

Conclusion: An association between hyperemesis gravidarum and H pylori infection is suggested by this systematic review. However, the considerable heterogeneity among studies highlights study limitations.

Golberg D, et al Hyperemesis gravidarum and Helicobacter pylori infection: a systematic review. Obstet Gynecol. 2007 Sep;110(3):695-703

use of a pacifier might help meet the baby's extra need to suck and give the parents a chance to sleep.

A little review about the "pacifier or not question" with full term, healthy, breastfeeding newborns:

- Avoid pacifiers until breastfeeding is well established. Establishing breastfeeding takes approximately 6-10 weeks.
- If there are problems with breastfeeding such as poor weight gain, sore nipples, repeat thrush, fretful nursing – pacifiers could be a key part of the problem.
- If the baby is thriving and the family is becoming overwhelmed, occasional use of a clean, safe pacifier could be a reasonable thing.
- If the family is eager to use a pacifier with their newborn, encourage them to watch and avoid pacifier use if there are problems with weight gain, fussy latch or nipple tenderness.

References: Online

*Dummy—British, New Zealand, Australian term
Binki/binky—US commercial term, 1935
Soother—Canadian, Irish term

Alaska State Diabetes Program

Barbara Stillwater

Children whose mothers are overweight: Higher levels of body fat themselves at age nine

Conclusions: Mothers with a higher pre-pregnant body mass index or a larger mid-upper arm circumference during pregnancy tend to have children with greater adiposity at age nine. The extent to which this is attributable to genetic factors, the influence of maternal lifestyle on that of her child, or maternal adiposity acting specifically during pregnancy on the child's fat mass cannot be determined in this study.

Gale CR et al Maternal Size in Pregnancy and Body Composition in Children. J Clin Endocrinol Metab. 2007 Aug 7

Obstetrics

Extraabdominal uterine repair at cesarean: Increased patient discomfort, nausea, vomiting

CONCLUSION: Exteriorization of the uterus for repair is associated with an increased incidence of nausea and vomiting and tachycardia during cesarean delivery under spinal anesthesia. Uterine repair should be done in situ where possible. LEVEL OF EVIDENCE: I.

Siddiqui, M et al Complications of Exteriorized Compared With In Situ Uterine Repair at Cesarean Delivery Under Spinal Anesthesia Obstet Gynecol. 2007 Sep;110(3):570-5.

Family Planning

Advance Provision for Emergency Oral Contraception

Clinical Question: Does providing women with emergency oral contraception in advance for use as needed change pregnancy rates, frequency and timing of contraceptive use, risk of sexually transmitted infections, or sexual behavior?

Evidence-Based Answer: Providing oral emergency contraceptives in advance to fertile women for use after unprotected sexual intercourse (i.e., advance provision) does not affect pregnancy rates, condom use, sexually transmitted infection rates, or type of contraception used. Advance provision more than doubles the odds that a woman will use emergency contraception once and more than quadruples the odds that she will use it two or more times. It also reduces the time from sexual intercourse to emergency contraceptive use by about 15 hours.

Practice Pointers: To increase the availability and use of emergency contraception, the American College of Obstetricians and Gynecologists recommends one 1.5-mg dose of levonorgestrel (Plan B) or two 0.75-mg doses taken 12 to 24 hours apart for women who have had unprotected or inadequately protected sexual intercourse.1 This practice guideline supports advance provision. The American Academy of Pediatrics has a similar policy.2 The American Academy of Family Physicians does not specifically address advance provision.3 Although combined contraceptive pills and mifepristone (Mifeprex) can be used for emergency contraception, levonorgestrel is better tolerated, is more effective, and is approved by the U.S. Food and Drug Administration for over-the-counter distribution.

This Cochrane review included randomized controlled trials comparing advance provision with standard access to emergency contraception. The review included eight trials (6,389 total participants); five of the trials were conducted in the United States. Two studies had the power to show a difference in pregnancy rates. Control groups received general contraceptive counseling, information about emergency contraceptives, and/or access to emergency contraception on request. Most of the trials provided one to three courses of levonorgestrel and followed patients for three to 12 months.No study found a difference in pregnancy rates. Women who had advanced access to emergency contraception were about 2.5 times more likely to use it once and over four times more likely to use it two or more times. These women were also more likely to take the contraception an average of about 15 hours sooner after sexual intercourse than those in the control groups. The three studies that measured rates of sexually transmitted infections did not find a difference between groups. The five studies that reported on contraception use did not find differences between groups in the type or frequency of contraception use, including condom use. The six studies that compared frequency of unprotected sexual intercourse did not find a difference between groups. No adverse events were reported in any of the studies.

Although most women took the first contraceptive pill as directed, in one study, 17 percent of women who received advanced access took the second pill incorrectly. Therefore, single-dose regimens may be preferable. Providing women with advanced access to emergency contraception appears to be safe but does not reduce pregnancy rates on a population level. However, individual women might benefit because advance provision increases the speed and frequency of contraceptive use. Cochrane Briefs

Polis CB, Schaffer K, Blanchard K, Glasier A, Harper CC, Grimes DA. Advance provision of emergency contraception for pregnancy prevention (full review). Cochrane Database Syst Rev 2007;(2):CD005497

Information Technology

Changes in workflow and tasks need to be assessed when introducing bar code medication administration into nurses' work

Bar code medication administration (BCMA) technology is being implemented slowly in hospitals across the United States. The BCMA technology consists of a medication network server and handheld devices that connect to medication administration record data through a wireless radio frequency link.

The software system enables users to document the administration of medications at the bedside or other points of care in real time. When hospitals introduce a new technology like BCMA, they should study how the technology will change nurses' workflow and tasks as well as the safe administration of medications, according to a new study.

A human factors engineer and a pharmacist observed use of BCMA technology during medication administrations to identify work system factors that affected nurses' use of and interaction with the technology when they administered medications. Nurses varied in the order in which they performed steps of the medication administration process, with a total of 18 different sequences identified.

Some of these sequences were contrary to hospital policy and the original design of the medication administration process. In addition, they could be considered workarounds or potentially unsafe acts, notes Pascale Carayon, Ph.D., of the University of Wisconsin-Madison. Interruptions and patient factors typically were precursors to medication errors and workarounds. For example, in 32 percent of observations, nurses were interrupted by the needs of patients and their families, nurses were interrupted by another provider or the nurse initiated an exchange with another provider, or interruptions were caused by equipment, technology, or medications.

Patient factors like unique patient populations (children, the disabled, or the critically ill) or contact isolation requirements also affected medication administration. These factors may not have been taken into consideration during the development of BCMA technology, note the researchers. Their study was supported by the Agency for Healthcare Research and Quality (HS14253).

Evaluation of nurse interaction with bar code medication administration technology in the work environment, by Dr. Carayon, Tosha B. Wetterneck, M.D., Ann Schoofs Hundt, Ph.D., and others, in the March 2007 Journal of Patient Safety 3(1), pp. 34-42.

International Health Update

Claire Wendland, Madison, WI

Prevention of Mother-to-Child HIV Transmission: An Innovative Program in Cameroon

For over twenty years, the Cameroon Baptist Convention Health Board (CBCHB) has set up and maintained primary health centers in the more isolated villages of rural Cameroon. Literate women selected by village leaders are trained as birth attendants who provide basic antenatal care, attend low-risk deliveries, and triage high-risk women to facilities with more resources. (At least in theory – many women don't have adequate transportation to get to those facilities.) In a recent article in the Journal of Midwifery and Women's Health, Benjamin Wanyu and colleagues describe the initiation of a program in which those birth attendants were also trained in services designed to reduce the prevention of mother-to-child HIV transmission. Trained birth attendants are now able to provide group pretest counseling, voluntary HIV testing (using rapid oral tests — the only lab test of any kind currently available in these health centers), individual posttest counseling and single-dose nevirapine administration for mothers and newborns.

In the program's first three years, the birth attendants in twenty village health centers tested over 2300 women. Of the 82 women (3.5%) with positive tests, 42 were delivered by the birth attendants, and of those 88% of mothers and 85% of newborns received single-dose nevirapine prophylaxis.

The program encountered several problems. It has proved difficult to maintain adequate supplies of HIV test kits, a problem made worse by the short shelf-life of the oral kits. (In fact, program administrators are shifting to a blood test, which is more stable for storage and also — because it is donated — is cheaper for the program.) Maintaining regular stocks of nevirapine in these geographically isolated clinics has also proved to be problematic, and the syrup is particularly difficult as it too has a short shelf life. Because the oral tests have a reasonably high false-positive rate, the program's protocol dictates a second test to be done by a nurse supervisor who would visit monthly for this purpose. Transportation for both nurse supervisors and patients was an obstacle to this plan, especially during the rainy season when the roads and trails are in terrible condition, and over a third of the women with an initial positive test never had the second test done. The most serious problem the program encountered was the stigma associated with HIV/AIDS. This stigma is so great that 11 families moved out of their communities after the first positive test, and program coordinators also reported problems with domestic violence related to positive test results. Despite these drawbacks, the program had many significant successes. An astonishing 99% of women counseled accepted the tests, which is much higher than rates seen elsewhere and may be related to the respected position of these

Domestic Violence

Denise Grenier, Tucson
Rachel Locker, Warm Springs

Domestic Violence Awareness Month: October

October is national Domestic Violence Awareness Month (DVAM). This is an annual observance sponsored by the National Coalition Against Domestic Violence. Every October across the country, domestic violence survivors and advocates, health care providers, elected officials, law enforcement and public safety personnel, business leaders, faith-based groups and many others are organizing and participating in domestic violence memorial activities, public education campaigns and community outreach events. If you would like more information about how your facility can participate in DVAM activities, visit **www.ncadv.org**

birth attendant counselors in their communities. In addition, the treatment rates for both mothers and infants are better than those seen in the larger hospitals running similar programs. Best of all, only about 15% of infants had positive HIV tests at 15 months of age, comparable to what has been seen with nevirapine-based trials in urban settings.

Many of you will be pleased to know that there is an Indian Health Service connection with this excellent program. The program's associate directors, who were also instrumental in obtaining the grant that funded it, are long-time I.H.S. veterans Drs. Tom and Edie Welty.

Wanyu B, Diom E, Mitchell P et al. 2007 Birth attendants Trained in "Prevention of Mother-to-Child HIV Transmission" Provide Care in Rural Cameroon, Africa. J Midwifery Womens Health 2007; 52(4):334-341.

OB/GYN CCC Editorial

Edie and Tom retired from IHS after 26 years (23 with IHS and 3 with CDC) in 1997. They began to work as volunteers with the Cameroon Baptist Convention Health Board in 1998 and go there about 6 weeks a year to support their program. They wrote a grant to Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) in 2000, which was one of eight programs funded and EGPAF has renewed it annually since then. The AIDS Program is quite comprehensive (summary available upon request).

"It is very gratifying for us to see how much they have accomplished with minimal resources. Everyone has been affected by HIV and is motivated to do as much as possible to prevent and treat it." Tom and Edie Welty

MCH Headlines

Judy Thierry HQE

AI/AN researchers on perinatal depression requesting names of interested individuals

Researchers that could knowledgeably present the American Indian/Alaska Native perspective related to parental depression (maternal, paternal, or both); as well as other issues that may place children at risk for developing depression and/or behavioral disorders—such as substance abuse and intimate partner violence are being sought.

Institute of Medicine IOM is also interested in learning about any promising community-based interventions that address these issues for our populations. Institute of Medicine is interested in identifying speakers for future committee meetings.

Submit names and contact info to me or have people contact me directly

Thanks so very much.

Judy

Judith.Thierry@ihs.gov

Medical Mystery Tour

Endometriosis: Where is the real truth?

Here are some questions to ponder.

1.) Endometriosis virtually always progresses in severity without treatment
True False

2.) Postoperative medical therapy has been shown to produce significant benefit in reducing pain in women who have treated for endometriosis laparscopically
True False

3.) Appoximately 40% of women with endometriosis and pain will derive symptomatic benefit from treatment with placebo
True False

4.) Surgical modalities, such as electrocautery, laser, or harmonic scalpel appear to be equally effective in treating endometriosis
True False

5.) Surgical aspiration is the preferred treatment method for women with ovarian endometrioma
True False

6.) Treatment with a GnRH analog for 6 months is associated with an increased fracture risk in women with endometriosis
True False

7.) Interstitial cystitis coexists with endometriosis in approximately 10 percent of cases
True False

8.) The extent of endometriosis does not parallel the extent of improvement after surgical therapy, e. g., minimal disease – most benefit; greatest amount of disease – least response
True False

Extra credit question

Promising therapies for endometriosis include:

- Aromatase inhibitors
- RU-486
- Levonorgestrel containing IUDs
- Antiangiogenic cancer therapy
- None the above
- All of the above

We'll thoroughly discuss the answers next month, but you can preview the answers on page 15.

Midwives Corner

Lisa Allee, CNM, Chinle

Piercing the veil: the marginalization of midwives in the United States

This paper investigates the marginalization of certified nurse-midwives (CNMs) in the US. This marginalization occurs despite ample evidence demonstrating that a midwifery model delivers high-quality cost-effective care. Currently midwives attend only 7% of births, compared to 50-75% of births in other developed countries. Given the escalating costs of health care and relatively poor maternal and child health indicators in comparison with other developed countries, these findings are disturbing. This paper investigates this paradox through a qualitative case study of two prestigious but declining midwifery services in a large US city. Fifty-two multi-sited in-depth interviews were conducted along with an analysis of relevant archival sources. It was found that institutions successfully altered maternity care and diminished midwifery services without accountability for their actions. These findings illuminate the larger political-economic forces that shape the marginalization of midwifery in the US.

Goodman S. Piercing the veil: the marginalization of midwives in the United States. Soc Sci Med. 2007 Aug;65(3):610-21.

Navajo News

John Balintona, Shiprock

Evaluation of the pregnant patient for non-obstetric surgery: Part Two

Editorial Note:

This is Part Two of a two Part series on Evaluation of the Pregnant Patient for Non-obstetric Surgery. Part One discussed the Epidemiology and Maternal Adaptation in Pregnancy and is available here **http://www.ihs.gov/MedicalPrograms/MCH/M/obgyn0907_Feat.cfm#navajo**

Part Two; Laboratory Data and Imaging Studies

The maternal blood volume increases markedly throughout pregnancy with levels 40 to 50 percent above nonpregnant levels when at term. This increased volume is a result of both an increase in plasma, as well as, erythrocytes with a slightly higher increase in plasma volume. Therefore, despite the increased erythropoesis, normal pregnancies result in a slight decrease in both hemoglobin concentration and hematocrit. A hemoglobin

Frequently Asked Questions (FAQ)

What's the first course of action for this couple that's trying to conceive?

When assessing a couple who comes to the clinician complaining of inability to conceive after 1 year, which of the following statements best describes the first course of action?

- The female partner should be administered an ovulation stimulator to help promote conception
- A careful medical history of both partners should be taken to assess fertility risk factors
- The male partner should undergo tests to evaluate ejaculatory function and semen quality
- Both partners should provide blood samples to test for hormone levels

Go here to find out
www.medscape.com/viewarticle/559055_7

A hint is available on page 15

Midwives Corner

Nurse Midwife Week October 7–13, 2007

National Midwifery Week, October 7-13, 2007, is a wonderful occasion celebrating midwifery and midwives' commitment to being "With Women, for a Lifetime." Whether you are a midwife, a new parent or grandparent, or you're just seeking information about midwifery, this week will be filled with educational opportunities. Please hug all the midwives you see, after you help them work for equitable reimbursement, that is.
www.midwife.org/index.cfm?id=312

concentration below 11.0 g/dl should be considered abnormal in a term pregnancy resulting typically from iron deficiency and not hypervolemia of pregnancy. The blood leukocyte count can vary widely during pregnancy, quoted by experts as typically between 5, 000 – 12, 000/ml with a normal range of 14, 000 to 16,000 shortly after delivery. Many obstetric providers have observed the "leukocytosis of pregnancy", but must take into account other signs and symptoms of infection when interpreting this lab value. Gestational thrombocytopenia of pregnancy is a known phenomenon. The platelet level is usually greater than 70, 000, and after a thorough evaluation and dismissal of other conditions and lack of signs of abnormal bleeding an obstetric provider may elect to continue to observe these pregnant patients. Although there is no firm recommendation for platelet transfusion in relation to pending nonobstetric surgery, it may be reasonable to use a threshold of greater than 50, 000 platelets for platelet transfusion. The levels of several blood coagulation factors are increased during pregnancy, e.g. fibrinogen, factor VII, VIII, IX, and X all of which are important components in producing clot. The natural inhibitors of coagulation including ATIII, protein C and S have been shown to be unchanged quantitatively with protein S activity being shown to decrease. The clotting time of pregnant patients when compared to their nonpregnant counterparts shows no significant change. The overall effect of these changes in coagulation factors predisposes toward a hypercoagulable state and this can have implications for those who undergo surgery. The prolonged immobilization coupled with the aforementioned physiologic changes may predispose some patients to the development of thrombosis and therefore proper prophylaxis should be initiated.

Basic chemistry studies are included in the evaluation of any surgical patient. Pregnancy is shown to confer a decrease in serum sodium and potassium, but the literature does not give a firm range of normal values during pregnancy. In the absence of signs and symptoms of hyponatremia or hypokalemia, intervention is not indicated. Due to the respiratory alkalosis of normal pregnancy the serum bicarbonate level subsequently decreases from about 26 to 22 mmol/L, but this should not be interpreted as acidosis in most cases. Due to the increase of glomerular filtration rate during pregnancy, serum levels of creatinine and urea normally decrease as a consequence. Some of the laboratory tests that are commonly used to evaluate hepatic function are appreciably different in pregnancy. Total alkaline phosphatase levels almost double during pregnancy where serum albumin levels show a decrease to an average of 3.0 g/L. Despite these changes, there is no distinct change in liver morphology or function in normal pregnant women.

A finding of glucosuria during pregnancy is not necessarily abnormal. An increase in glomerular filtration may account for the majority of glucosuria, but again this finding should be taken in context especially when evaluating the patient for presumed gestational diabetes or related diabetic condition. Proteinuria is normally not evident during pregnancy, however some suggest that levels up to around 115 mg/day, which translates to "trace" on a urine dipstick test, may be considered normal. A pregnant patient who presents with hematuria, if not resulting from contamination, is compatible with the diagnosis of urinary tract disease, i.e. infection, urolithiasis, etc. Evidence of nitrites in the urine is diagnostic for urinary tract infection in both pregnant and nonpregnant individuals. The presence of leukocyte esterase, representing white blood cells in the urine may be indicative of infection but not in all cases.

Imaging techniques such as plain film, computerized tomography (CT), magnetic resonance imaging, and ultrasound are utilized in the evaluation of patients despite their pregnancy status. While the majority of diagnostic procedures are associated with little or no known significant fetal risks, obtaining certain imaging tests in a known pregnant patient may be difficult due to the reluctance from the nonobstetric provider. One must remember that certain conditions, e.g. life-threatening emergencies and trauma, may necessitate imaging modalities. Furthermore, according to the American College of Radiology (ACR), no single diagnostic procedure results in a radiation dose significant enough to threaten the well being of the developing embryo and fetus. The obstetric provider, however, must be cognizant of the accepted threshold for ionizing radiation (< 5 rad) as well as the estimated gestational age, organogenesis occurring between 8 and 15 weeks gestation, when recommending imaging studies. Abdominal shielding is also a reasonable recommendation when it is indicated. The American College of Obstetricians and Gynecologists (ACOG) has published guidelines reviewing the effects of imaging during pregnancy and are summarized as follows:

1. Women should be counseled the x-ray exposure from a single diagnostic procedure does not result in harmful fetal effects. Specifically dose less than 5 rad.
2. Concern about possible effects of high-dose ionizing radiation should not prevent medically indicated procedures from being performed. One should consider imaging procedure not associated with ionizing radiation.
3. Ultrasonography and magnetic resonance imaging are not associated with known adverse effects. First trimester use of MRI is still considered controversial.
4. Consultation with a radiologist may be helpful in calculating total fetal dose when multiple studies are indicated
5. The use of radioactive isotopes of iodine is contraindicated for therapeutic use during pregnancy.

Anesthetic and Operative Considerations

Most obstetric authorities would contend that the risk of an adverse pregnancy outcome is not increased after undergoing most technically uncomplicated or anesthetic procedures. The risk of spontaneous abortion or premature labor may be increased, however, when the surgical condition or procedure is associated with complications. The most prudent recommendation that one can offer is that consideration for nonobstetric surgical intervention in a pregnant patient should be individualized.

The American Society of Anesthesiologists (ASA) has published guidelines regarding the practice of obstetric anesthesia, but these are implicitly stated to not apply to nonobstetric surgical intervention during pregnancy. After a careful review of the ASA guidelines, one may be able to extrapolate certain recommendations that are probably useful for the pregnant woman. Each patient, pregnant or nonpregnant, deserves some type of preanesthetic evaluation to include an appropriate history and physical exam. Preoperative labs can be individualized. Solid food intake should be avoided for at least 6 hours in patients undergoing elective surgery and timely administration of aspiration prophylaxis should be considered.

The administration of prophylactic antibiotics may be individualized and ACOG practice bulletins #47 (Prophylactic Antibiotics in Labor and Delivery) and #74 (Antibiotic Prophylaxis in Gynecologic Procedures) provide guidelines for its use.

ACOG practice bulletin #9 (Antenatal Fetal Surveillance) does state that all indications for antepartum testing must be considered somewhat relative, but in general antepartum fetal surveillance has been employed in pregnancies in which the risk of fetal demise is increased. There is insufficient literature to demonstrate that perianesthetic recording of fetal heart rate prevents fetal or neonatal complications. In spite of its unproven value, antepartum fetal surveillance is widely integrated into clinical practice in the developed world. The obstetric provider should take into account several factors such as gestational age, continuation of medical/surgical condition, etc when making recommendations for perioperative antepartum fetal surveillance.

Obstetric providers have an enormous opportunity and responsibility for ensuring the best possible maternal and fetal outcome for nonobstetric surgical procedures. Knowledge of physiologic and laboratory changes, as well as, advice on perioperative management should be well communicated between the obstetric provider and other members of the health care team. This review highlights some of the aspects of care that should be conveyed and provides a general rational approach to management. In the coming issues, more in depth review of specific conditions, such as appendicitis, biliary gallstone disease, urolithiasis, adnexal masses in pregnancy, and trauma in pregnancy will be presented…stay tuned!

References:

1. *Williams Obstetrics. 22nd Edition. 2005. Chapter 42. General Considerations and Maternal Evaluation*
2. *American College of Obstetrics and Gynecologists. 2004. Committee Opinion # 299. Guidelines for Diagnostic Imaging During Pregnancy*
3. *American Society of Anesthesiologists. 2006. Practice Guidelines for Obstetric Anesthesia*

Part One in this series is available here
http://www.ihs.gov/MedicalPrograms/MCH/M/obgyn0907_Feat.cfm#navajo

Questions? Contact John Balintona
John.Balintona@ihs.gov

Menopause Management

Estrogen Protects Women's Brains Prior to Menopause

Conclusions: Both unilateral and bilateral oophorectomy preceding the onset of menopause are associated with an increased risk of cognitive impairment or dementia. The effect is age-dependent and suggests a critical age window for neuroprotection.

Rocca WA et al Increased risk of cognitive impairment or dementia in women who underwent oophorectomy before menopause. Neurology. 2007 Aug 29

Breastfeeding

Medications: Information for Pregnant and Breastfeeding Women

As additional research is published, it is increasingly important that women talk with their doctor about the risks and benefits of taking prescription and over-the-counter drugs, vitamins, and dietary or herbal supplements before getting pregnant, during pregnancy, and while breastfeeding. A survey in the U.S. in 1998–99 found that 46% of women in their childbearing years took a prescription medicine during the previous week. So, it is important that we know more about which medications may be harmful during pregnancy and breastfeeding and which are not.

http://www.cdc.gov/Features/MedicationUse/

Nurses Corner

Kendra Carter

Memories, As a Public Health Nurse on the Navajo

Marie A. Swigert, RN MS is one of those nurses who have managed to be a staff nurse in the hospital prior to becoming the Director of Community Health Nursing for the State of Colorado. Along the way she stopped at Northern Navajo Medical Center.

She graduated nursing in 1957 from the University of Connecticut and earned her Master of Science in nursing in 1967 from University of Colorado in Boulder. She became a nurse to earn her blue and red cape however what she got was the white dress and white shoes and her cap. The year she graduated they discontinued the cape. She still has the white dress and she presented me with her cap during my graduation from nursing school in 2002. She has been a source of inspiration for me as well as for others along our way to become nurses.

Here are her stories about Maternal Child Health in the Indian Health Services.

I worked on the Navajo in the middle '70s. I was attached to the public health section of the Shiprock Service Unit (IHS employee) as Nursing Director/Supervisor. We had approximately 5-6 nurses, either RNs, LPNs who were assigned as public health, school, and clinic nurses. Also included were our driver-interpreters and CHNs (community health aides), our office also worked closely with the environmental health team who were located in same office, as well as the nutritionist and her nutrition aides.

Our office was on the first floor of the apartment building adjacent to the old hospital. All of the nursing staff and other health teams worked closely together. One of my strongest memories is that of our off site MCH clinics held in the small communities which constituted the Shiprock Service Unit that covered the Four Corners area of Colorado, New Mexico, Arizona, and Utah.

In the morning of the MCH clinics we would collect our supplies and materials. Our driver/interpreter telling us 'we're going to late'. Off we head for Sanostee or one of the other small communities with our crew, our nurses, nutritionist, nurse-midwives and whomever. Arriving, we would open the clinic building, air it out and let our first families. Many had been waiting for us to open.

The Public Health nurses would do the child health portion of the clinic, the nurse midwife the maternal portion, the nutritionist and her staff the food aspect. All of us shared in the nutrition part as we partook of the food prepared by them. They always made enough for the mothers, children, staff, and whoever else was there.

The PHNs did the well baby checks, assessments of "sick kids" and occasionally grandmas too.

Ear infections were the bane of our assessments. I remember one time, having told one young mom that propping the baby's bottle was not healthy and increased ear infections. I told her "you don't prop the bottle when feeding you sheep, you can't do it with your baby." She agreed, somewhat reluctantly. The next visit, there she was in the lobby at Sanostee. As I approached her she yelled out, "I didn't prop the bottle, I really didn't." Sure enough, the baby's ear infection was much improved.

We had protocols which allowed us to treat ear infections so long as we appointed them back to our clinic or the Shiprock clinic. Our protocols included immunizations, treatment for impetigo and other minor infections. Any infection treatment, we reviewed with the doctors prior to the next local clinic. Our community clinics were held monthly, located in communities such as Toadlene, Tees Nos Pos, Checkerboard and others.

The families valued our clinics; I remember one instance when a grandmother carried her grandson over to our clinic. It had rained the night before the roads were muddy. The bottom of her shirt and shoes were covered with mud. Her grandson had been vomiting and had diarrhea all night, she said. He was a sick little fellow. So, we cleaned him up as best we could, told Grandma that he needed to be seen in Shiprock: "you take him' she asked, 'yes we take him'. Much to the displeasure of the driver, I said I would sit in the front seat of the car, as I had more room. The youngster's clothes were soiled and a bit smelly. Once in Shiprock, the child was admitted and Grandma came in that evening to see him. I think most everyone knew 'I was the PHN that brought the feverish but smelly child in and I got smelly too as his clothes were wet.

The Navajo people and their land are fascinating; I don't practice nursing anymore, but do return as a reading and math tutor at the public schools in Mexican Hat and Monument Valley. As one Navajo, told me 'you get our sand in your shoes, you return.' It's true.

Submitted by Marie A Swigert and LTJG Kendra A. Carter RN BSN USPHS
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Perinatology Picks

George Gilson, MFM, ANMC

Procedure-related complications of amniocentesis and CVS are small

Results: After genetic amniocentesis, pooled pregnancy loss within 14 days was 0.6% (95% confidence interval [CI] 0.5-0.7), rising to 0.9% (95% CI 0.6-1.3) for pregnancy loss before 24 weeks and 1.9% (95% CI 1.4-2.5) for total pregnancy loss. Corresponding figures for CVS were 0.7%, 1.3%, and 2%. Conclusion: Although the risks of pregnancy loss are relatively low, lack of adequate controls tends to underestimate the true added risk of prenatal invasive procedures.

Mujezinovic F, Alfirevic Z. Procedure-related complications of amniocentesis and chorionic villous sampling: a systematic review. Obstet Gynecol. 2007 Sep;110(3):687-94

Women's Health Headlines

Carolyn Aoyama, HQE

Ovarian Cancer: Pinn Point on Women's Health

The Office of Research on Women's Health (ORWH) is broadcasting the fifth in a series of podcasts, "Pinn Point on Women's Health," hosted by Dr. Vivian W. Pinn, Associate Director for Research on Women's Health and the Director of the Office of Research on Women's Health. The monthly podcast discusses the latest news in women's health research and includes conversations with guests on a variety of subjects. In this episode, Dr. Pinn discusses ovarian cancer, the leading cause of gynecological cancer death, with Dr. Edward L. Trimble, Head, Gynecologic Cancer Therapeutics and Quality of Cancer Care Therapeutics, Clinical Investigation Branch, Cancer Therapy Evaluation Program, Division of Cancer Treatment and Diagnosis, National Cancer Institute.

"September is National Ovarian Cancer month and being aware of the subtle symptoms of ovarian cancer is an important step towards early diagnosis," emphasized Dr. Trimble. "Sharing information with your physician about a family history of ovarian cancer, and getting a physical exam and pelvic ultrasound and blood tests, if necessary, are all important in recognizing ovarian cancer in its earliest and most treatable stage."

"Podcasting" is a relatively new method of distributing audio and video information via the Internet to iPods and other portable media players on demand, so that it can be listened to at the user's convenience. The main benefit of podcasting is that listeners can sync content to their media player and take it with them to listen whenever they want to. Because podcasts are typically saved in MP3 format, they can also be listened to on nearly any computer.

To listen to Dr. Pinn's podcast, visit the ORWH homepage at http://orwh.od.nih.gov/ and click on Podcast 5: Ovarian Cancer Symptoms. If you need further assistance on how to use podcasts, go to http://www.nih.gov/news/radio/nihpodcast.htm

For questions, contact Marsha Love at the Office of Research on Women's Health by calling (301) 496-9472 or e-mailing lovem@od.nih.gov

(Hot Topics…, continued from page 5)

Patients declined because of cost, lack of interest, autonomy, other life issues, fear of screening, and lack of symptoms. Patients who were up to date received (1) diagnostic testing (for previous colon pathology or symptoms; 56%) or (2) asymptomatic screening (44%). Physicians who were more adamant about screening had higher screening rates ($P < .05$; Wilcoxon rank sum). Physicians framed their recommendations differently ("I recommend" vs "They recommend"), with lower screening rates among physicians who used "they recommend" ($P = .05$; Wilcoxon rank sum).

Conclusions: Reasons many patients remain unscreened for CRC include (1) factors related to the health care system, patient, and physician that impede or prevent discussion; (2) patient refusal; and (3) the focus on diagnostic testing. Strategies to improve screening might include patient and physician education about the rationale for screening, universal coverage for health maintenance exams, and development of effective tracking and reminder systems. The words physicians choose to frame their recommendations are important and should be explored further.

Levy BT et al Why Hasn't This Patient Been Screened for Colon Cancer? An Iowa Research Network Study The Journal of the American Board of Family Medicine 20 (5): 458-468 (2007)

Migraine With Aura Increases Risk for Ischemic Stroke

Conclusions: Probable migraine with visual aura (PMVA) was associated with an increased risk of stroke, particularly among women without other medical conditions associated with stroke. Behavioral risk factors, specifically smoking and oral contraceptive use, markedly increased the risk of PMVA, as did recent onset of PMVA.

MacClellan LR, et al Probable migraine with visual aura and risk of ischemic stroke: the stroke prevention in young women study Stroke. 2007 Sep;38(9):2438-45

Medical Mystery Tour Answers

(from page 11)

1) F	5) F
2) F	6) F
3) T	7) F
4) T	8) F

Extra Credit Answer = all of the above

FAQ *Hint: (from page 11)*

One of the most important components of a fertility assessment is the careful medical history.

SAVE THE DATES

Victim Advocates And Tribal Law Enforcement

- October 17–18, 2007
- Tucson, Arizona
- Domestic Violence Expert Witness Institute
- www.swclap.org

Second National Summit on Preconception Health and Health Care

- October 29–31 2007
- Oakland, California
- CDC and March of Dimes
- www.marchofdimes.com/california/4947_24789.asp

2007 National HIV Prevention Conference

- December 2–5, 2007
- Atlanta, Georgia
- Centers for Disease Control and Prevention
- www.2007nhpc.org/conferenceinfo.asp

23nd Annual Midwinter Indian Health OB/PEDS Conference

- February 8–10, 2008
- For providers caring for Native women and children
- Telluride, Colorado
- Contact Alan Waxman AWaxman@salud.unm.edu

Abstract of the Month

- Group Prenatal Care Improves Pregnancy Outcomes at No Additional Cost

IHS Child Health Notes

- A randomized, controlled trial of a removable brace versus casting in children with low-risk ankle fractures.
- Superhero-related injuries in paediatrics: a case seriesInfectious Disease Updates
- Influenza Vaccination for 2007-8
- Locums Tenens and Job Opportunities

From Your Colleagues

- Craig Vanderwagen—Rebuilding Iraq one step at a time: You can be part of the solution
- Roberta Ward, ANMC—First trimester screening for Down Syndrome

Hot Topics

- Obstetrics—Do Unsutured Second-Degree Perineal Lacerations Affect Postpartum Outcomes?
- Gynecology—Cervical cancer differences disappear in rural women after controling for poverty and race
- Child Health—How to improve psychosocial problems at well child care visits?

Features

- ACOG—Pelvic Organ Prolapse
- Ask a Librarian—In Search of a Research Article?
- Breastfeeding—A pacifier by any other name....*
- Alaska State Diabetes Program—Children whose mothers are overweight....
- Family Planning—Advance Provision for Emergency Oral Contraception
- Information Technology—Changes in workflow and tasks need to be assessed when introducing bar code medication administration into nurses' work
- International Health Update—Prevention of Mother-to-Child HIV Transmission: An Innovative Program in Cameroon
- Domestic Violence—Domestic Violence Awareness Month: October
- Medical Mystery Tour—Endometriosis: Where is the real truth?
- Midwives Corner—Piercing the veil: the marginalization of midwives in the United

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