



Pelvic Floor Muscle Function and Urinary Incontinence: A Role for Physical Therapy

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The pelvic floor muscles are comprised of two layers of muscles. The deep layer of the pelvic floor is known as the levator ani muscle group. The superficial layer is known as the urogenital diaphragm muscles (consisting not only of the deep transverse and superficial transverse perineal muscles but also the bulbocavernosus and ischiocavernosus muscles, and the anal sphincter muscle). <http://incontinet.com/kegelpix.htm>

The functions of the pelvic floor muscles are to squeeze around the pelvic openings and to provide and inward lift.^{1, 2} When these two muscle group layers are not contracting simultaneously, or if the contraction is preceded by an increase in abdominal pressure, stress urinary incontinence can occur.^{1, 3}

Stress Incontinence is defined by the International Continence Society as the complaint of any involuntary leakage of urine.⁴ Stress incontinence, the most common type of urinary incontinence in women, is defined as the involuntary leakage of urine on effort or exertion, such as sneezing or coughing.^{1, 4}

There is good evidence to support the use of pelvic floor muscle training to treat stress urinary incontinence.¹ Pelvic floor muscle training can improve the muscle control, timing of superficial and deep layer contractions, and the pelvic floor strength. Further, strengthening the pelvic floor muscles improves quality of life by

improving incontinence, increasing support of pelvic viscera and sexual functioning.

Without proper instruction, many women are unable to volitionally contract these muscle groups on demand as the pelvic floor muscles are located at the floor of the pelvis and seldom used consciously. One common error is the substitutions of gluteal, hip adductor and/or abdominal muscles rather than contraction the pelvic floor muscles.

Assessment of pelvic floor muscle strength can be done through clinical observation (although visual observation alone is often inadequate), vaginal palpation, ultrasound and MRI, or electromyography. Two main reasons for physical therapist to conduct high-quality assessment of pelvic floor muscle function and strength are: 1) to ensure proper pelvic floor muscle contraction technique prior to performing a strength exercise program, 2) to measure and assess program outcomes and adjust the training parameters (intensity, frequency, or duration) appropriately as indicated.¹

For more information on current physical therapy programs for urinary incontinence within American Indian and Alaska Native populations visit www.ihs.gov/medicalprograms/MCH/W/WHmature.asp#PT

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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

May 2005

Articles of Interest

The clinical significance of asymptomatic gross and microscopic hematuria in children.

Arch Pediatr Adolesc Med. 2005 Apr;159(4):353-5.

Asymptomatic microscopic hematuria: time to look the other way?

Arch Pediatr Adolesc Med. 2005 Apr;159(4):398-9.

- Asymptomatic microscopic hematuria is common at 5% at any visit and 1% of children have persistent microscopic hematuria
- Serious disease is rare in these children and investigation rarely identifies an etiology or need for treatment
- Gross hematuria has an identifiable and treatable cause in over 50% of cases
- Workup for microscopic hematuria in well children should be abandoned but is needed for gross hematuria

Etiology of community-acquired pneumonia in hospitalized school-age children: evidence for high prevalence of viral infections.

Clin Infect Dis. 2004 Sep 1;39(5):681-6. Epub 2004 Aug 13.

- Viruses were the leading cause of pneumonia at 65%
- Surprisingly, rhinovirus was the most common pathogen recovered at 45%
- *Mycoplasma pneumoniae* was the most common bacteria found at 35%
- *Streptococcus pneumoniae* was recovered in only 7% of patients
- Clinical, laboratory and radiological criteria could not distinguish viral from bacterial infections
- Given the high incidence of *Mycoplasma* infections it would be prudent to use a macrolide antibiotic as first line therapy in this age group

"It doesn't matter if the cat is black or white as long as it catches mice."

—Deng Hsaio P'ing 1904-1997

Editorial Comment

The three articles above address common clinical scenarios. The paper on pneumonia in school age children reminds us that amoxicillin is NOT always the best choice in pediatrics. In children 4- 18 years of age a macrolide antibiotic is the best choice. It is frustrating that there is still no combination of clinical, laboratory and radiological values that will allow us to reliably differentiate viral from bacterial infections.

The first two papers on hematuria address an even more common and annoying problem. What to do with patients who present with asymptomatic hematuria? The first answer is to stop obtaining urinalyses on well children: the recommendation to screen urine in well children was abandoned over 10 years ago by the AAP and the US Preventive Health Task Force because no benefit could be shown. This study confirms that recommendation.

Recent Literature on American Indian/Alaskan Native Health

Infant mortality statistics from the 2002 period: linked birth/infant death data set.

Natl Vital Stat Rep. 2004 Nov 24;53(10):1-29.

- American Indian neonatal mortality is similar to US all races now at 4.3/1000
- Unfortunately post neonatal mortality for American Indians is nearly twice that of US all races
- The excess mortality for Indians is almost entirely due to a rate of SIDS that is twice the US all races average

Meetings of Interest for Child Health

I.H.S. / A.C.O.G. Postgraduate Course:

Obstetric, Neonatal, and Gynecologic Care

June 19 - 23, 2005 in Denver, CO (late fee waved)

Contact Yvonne Malloy YMalloy@acog.org

202-863-2580

www.ihs.gov/MedicalPrograms/MCH/M/Documents/Brochure2005EL.doc

NEONATAL RESUSCITATION PROGRAM

June 19th at 8:00 am

Meeting Website—

www.ihs.gov/MedicalPrograms/MCH/M/CN01.cfm#June05

From Your Colleagues

Judy Thierry, HQE

Good Screening Tools for Substance Use: 5 P's or 4 P's

These instruments actually are very similar to each other. Both start with the premise that women relate more through their relationships with others and therefore the screen should address some of who else may influence their drinking behavior. This is quite different from traditional screens for men which usually look at things like tolerance, number of drinks to get drunk, black-outs, etc, i. e., the focus is also on identifying mostly heavy users in other screens

5 P's

1. Do either of your parents have a problem with using alcohol or drugs?
Yes, No, or No answer
2. Do any of your friends (peers) have a problem with drugs or alcohol?
Yes, No, or No answer
3. Does your partner have a problem with drug or alcohol use?
Yes, No, or No answer
4. Before you knew you were pregnant (past) how often did you drink beer, wine, wine coolers, or liquor?
Not at all, rarely, sometimes, frequently
5. In the past month (present) how often did you drink beer, wine, wine coolers or liquor?
Not at all, rarely, sometimes, frequently

Kennedy C, Finkelstein N, Hutchins E, Mahoney
Improving screening for alcohol use during pregnancy: the Massachusetts ASAP program. Matern Child Health J. 2004 Sep;8(3):137-47.

4 P's

1. Did either of your parents ever have a problem with drinking or using drugs?
Answers = Yes or No
2. Does your partner have any problem with drinking or using drugs?
Answers = Yes or No
3. Have you ever drunk alcohol?
Answers = Yes or No
4. In the month before you knew you were

pregnant, how many beers did you drink?

Answer = Quantity

5. In the month before you knew you were pregnant, how many cigarettes did you smoke?

Answer = Quantity

Developed by Ira Chasnoff, MD. An article will be published in the next few months on use of this screen with pregnant women in publicly funded clinics and some of the findings, to be published in the Journal of Perinatology. Lead author: Ira Chasnoff, MD

Chuck North, Albuquerque

Loss of bone mass is apparently reversed: Significant gains post DMPA discontinuation

CONCLUSION: Use of DMPA contraception in adolescents was associated with significant continuous losses of bone mineral density at the hip and spine. However, significant gains post-discontinuation provide evidence that the loss of bone mass is apparently reversed.

Scholes D, et al Change in Bone Mineral Density Among Adolescent Women Using and Discontinuing DMPA Contraception. Archives of Pediatrics and Adolescent Medicine 2005;159:139-144

Terry Cullen, Tucson

WHAT IS GPRA?

Contrary to popular belief, "GPRA" is not something the Indian Health Service (IHS) invented to "Get People Really Angry"! Well, what exactly is GPRA and how does it affect you, as a patient of IHS?

- GPRA = Government Performance and Results Act
- Is a federal law.
- Shows Congress how the Indian Health Service is performing based on a set of clinical measures.
- Information that is reported to Congress must be supported by data that can be verified and validated.
- IHS is subject to having its GPRA report audited.
- An annual GPRA Report is required every year.
- IHS (federal) operated facilities are

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Hormone Replacement Update

Exercise: Alternative to estrogen for endothelial dysfunction in postmenopausal women

CONCLUSIONS: In postmenopausal women, both acute exercise and estrogen therapy normalize FMD. However, their effects are not additive, possibly because of redundancy of nitric oxide signaling pathways activated by these 2 interventions. When considered in the context of recent trials with adverse cardiovascular outcomes, these results reinforce the therapeutic potential of exercise as an alternative nonpharmacological intervention to estrogen in postmenopausal women with endothelial dysfunction.

Harvey PJ, et al Exercise as an alternative to oral estrogen for amelioration of endothelial dysfunction in postmenopausal women. Am Heart J. 2005 Feb;149(2):291-7

Hot Topics

Obstetrics

Should we help patients decide on storage of umbilical cord stem cells?—Yes

“...The weight of current evidence, then, suggests that government-funded public umbilical blood banking is an idea whose time has come. From a cost-benefit and ethical perspective, it is hard, at present, to justify the value of private umbilical cord blood banking. However, in certain families at high risk for conditions that can be remedied by autologous stem cell therapy, the costs may be justified. Moreover, if cord blood proves a non-controversial source of embryonic stem cells, a far stronger case could be made for private banking. For all these reasons, when a patient asks me whether she should “collect the baby’s cord blood,” my short answer remains, “Maybe, but probably not.”—Charles Lockwood.

Editorial: Should we encourage storage of umbilical cord stem cells? Contemporary Ob/Gyn 2002;11:8-12. and Perlow, JH Cord Blood Banking: An Ob's Perspective Contemporary Ob/Gyn 2002;11

OB/GYN CCC Editorial comment:

Umbilical cord blood banking is vastly under-represented among minority populations in the US, including AI/AN. Much like other organ donation programs, AI/ANs have but to gain from donation to a public cord blood bank. If the individual AI/AN family has the resources for a private cord blood bank, then there are particular advantages for certain genetic AI/AN lineages. I have attached two resources to share with your patients to help in their decision making process.

In the meantime, health facilities in Indian Country should:

- provide non-directed patient education about public and private cord blood banking
- be willing to help in the logistical steps of collection for those AI/AN patients interested in pursuing cord blood banking, e.g., either with public cord blood banks, or for families using their own resources to pay for private cord blood banks.

A Parent's Guide to Cord Blood Banks

How much do your patients know about this potentially life saving technique?

There are private and public umbilical cord blood banks both with advantages and disadvantages. A Parent's Guide to Cord Blood Banks is a web site that places an emphasis on how to evaluate private bank services from a parent's viewpoint.

www.parentsguidecordblood.com

Cesarean and Vaginal Birth After Previous Cesarean Delivery

Data from the National Center for Health Statistics on the total and primary cesarean rates and vaginal birth after previous cesarean delivery (VBAC) rate in the United States from 1989 to

2003 were published in the January 21, 2005, recommendations and reports series of Morbidity and Mortality Weekly Report. Preliminary data from 2003 indicated that 27.6 percent of all U.S. births resulted from cesarean deliveries, representing the highest percentage ever reported in the United States and a 6 percent increase from 2002. The total cesarean delivery rate and the primary cesarean delivery rate (i.e., percentage among women with no previous cesarean delivery) have increased every year since 1997 after declines during 1989 to 1996. The rate of VBAC decreased by 63 percent to 10.6 percent in 2003, after increasing from 1989 to 1996. Among women with previous cesarean deliveries, the likelihood of future cesarean deliveries was approximately 90 percent in 2003. The accompanying figure shows the trends in rates of VBAC, total cesarean deliveries, and primary cesarean deliveries from 1989 to 2003.

Centers for Disease Control and Prevention. QuickStats: total and primary cesarean rate and vaginal birth after previous cesarean (VBAC) rate-United States, 1989-2003:

Epidural Analgesia During Labor Increases Risk of Abnormal Fetal Head Position

CONCLUSION: Fetal position changes are common during labor, with the final fetal position established close to delivery. Our demonstration of a strong association of epidural with fetal occiput posterior position at delivery represents a mechanism that may contribute to the lower rate of spontaneous vaginal delivery consistently observed with epidural.

LEVEL OF EVIDENCE: II-2.

Lieberman E, et al Changes in fetal position during labor and their association with epidural analgesia. Obstet Gynecol. 2005 May;105(5):974-82

Gynecology

Testosterone patch effective in hypoactive sexual desire in surgically menopausal

CONCLUSION: In surgically menopausal women with hypoactive sexual desire disorder, a 300 mug/d testosterone patch significantly increased satisfying sexual activity and sexual desire, while decreasing personal distress, and was well tolerated through up to 24 weeks of use. **LEVEL OF EVIDENCE:** I.

Buster JE, et al Testosterone patch for low sexual desire in surgically menopausal women: a randomized trial. Obstet Gynecol. 2005 May;105(5):944-52.

The physiologic effects of pneumoperitoneum in the morbidly obese

CONCLUSIONS: Morbidly obese patients undergoing laparoscopic bariatric surgery are at risk for intraoperative complications relating to the use of CO₂ pneumoperitoneum. Surgeons

(Hot Topics continued on page 5)

(Hot Topics continued from page 4)

performing laparoscopic bariatric surgery should understand the physiologic effects of CO₂ pneumoperitoneum in the morbidly obese and make appropriate intraoperative adjustments to minimize the adverse changes.

Nguyen NT, Wolfe BM. The physiologic effects of pneumoperitoneum in the morbidly obese. *Ann Surg.* 2005 Feb;241(2):219-26.

Child Health

To eat fruit and vegetables or not? Factors that influence consumers' decisions

Understanding Economic and Behavioral Influences on Fruit and Vegetable Choices provides information on the economic, social, and behavioral factors influencing consumers' fruit and vegetable choices. The article examines how cost, household composition and cultural background, and food-related lifestyle changes influence consumers' fruit and vegetable choices.

www.ers.usda.gov/AmberWaves/April05/Features/FruitAndVegChoices.htm

Chronic Illness

Screening for Asymptomatic Bacteriuria:

Recommendation Statement: USPSTF

Summary of Recommendations

The USPSTF strongly recommends screening for asymptomatic bacteriuria with urine culture in pregnant women at 12 to 16 weeks' gestation. A recommendation.

The USPSTF found good evidence that screening pregnant women for asymptomatic bacteriuria with urine culture significantly reduces symptomatic urinary tract infections, low birth weight, and preterm delivery. The benefits of screening and treatment substantially outweigh any potential harms.

The USPSTF recommends against routine screening for asymptomatic bacteriuria in men and nonpregnant women. D recommendation.

What are the best ways to quit smoking?

First you have to want to quit. Next here are some other methods to augment the will power.

Numerous effective pharmacotherapies for smoking cessation now exist. Except in the presence of contraindications, these should be used with all patients who are attempting to quit smoking.

Five first-line pharmacotherapies were identi-

fied that reliably increase long-term smoking abstinence rates:

- Bupropion SR.
- Nicotine gum.
- Nicotine inhaler.
- Nicotine nasal spray.
- Nicotine patch.

Two second-line pharmacotherapies were identified as efficacious and may be considered by clinicians if first-line pharmacotherapies are not effective:

- Clonidine.
- Nortriptyline.

Over-the-counter nicotine patches are effective relative to placebo, and their use should be encouraged.

Treating Tobacco Use and Dependence—Clinician's Packet. A How-To Guide For Implementing the Public Health Service Clinical Practice Guideline, March 2003. U.S. Public Health Service.

The Living to 100 Life Expectancy Calculator

One tool APHA and its partners are promoting to help identify and reduce the barriers that keep older Americans from getting the health care and information they need is The Living to 100 Life Expectancy Calculator. The tool was designed to translate what we have learned from studies of centenarians and other longevity research into a practical and empowering tool for individuals to estimate their longevity potential.

The average person is born with a set of genes that would allow them to live to 85 years of age and maybe longer. People who take appropriate preventive steps may add as many as 10 quality years to that. People who fail to heed the messages of preventive medicine may subtract substantial years from their lives.

www.agingresearch.org/calculator/

One size doesn't fit all

The US Department of Agriculture today presented its new guidelines that for the first time advise consumers to personalize their diet and exercise, geared to their specific calorie needs and levels of physical activity. MyPyramid Plan can help you choose the foods and amounts that are right for you. For a quick estimate of what and how much you need to eat, enter your age, sex, and activity level in the MyPyramid Plan box. www.mypyramid.gov/

International Health

Make Every Mother and Child Count: The World Health Report 2005

This year almost 11 million children under five years of age will die from causes that are largely preventable. Among them are 4 million babies who will not survive the first month of life. At the same time, more than half a million women will die in pregnancy, childbirth or soon after. The report says that reducing this toll in line with the Millennium Development Goals depends largely on every mother and every child having the right to access to health care from pregnancy through childbirth, the neonatal period and childhood.

www.who.int/whr

Medical Mystery Tour

#1 The Case of the Mystery Question

Please let us know—What is “the one mystery question?”

Case scenario:

While I was cross country skiing near an abandoned gold mine in Southcentral Alaska this winter...I heard about a 20 year old gravida 1 para 0 at 39 weeks has just delivered a 3250 gm healthy female infant after a prolonged second stage. The patient's pregnancy was complicated by severe pre-eclampsia diagnosed on the basis of serial blood pressures > 160/110 and over 5 grams of proteinuria. The patient received magnesium sulfate prophylaxis with a 4 gram bolus followed by 2 grams per hour IV. The patient received pitocin IV after delivery of the fetal shoulder.

Soon after delivery of an intact placenta, the patient is noted to have had a > 1500 cc blood loss. The patient is then managed with pitocin IV, two large bore IVs, crystalloid resuscitation, carboprost tromethamine 250 mcg x 2 IM, uterine exploration, bimanual massage, exploration of the uterus, and a thorough examination for trauma.

The patient's uterus was then packed with two 30 cc bulb foley catheters. The patient's history is re-reviewed and no history of blood dyscrasia is noted. The patient had received 1000 mcg of rectal misoprostol, but has now developed a copious clear diarrhea from her carboprost. The uterus is intermittently reported as firm, and then boggy throughout the course.

The patient has received 2 units of packed red blood transfusion, but continues to hemorrhage, as additional units are requested STAT. The patient is becoming hemodynamically unstable. The interventional radiology guideline only allows for

treatment of stable patients from 9:00 am to 4:30 PM during weekdays. The operating room is prepared for immediate surgery.

In the meantime, the attending staff member walks in to evaluate the patient before she is rushed to the operative suite. The attending asks the 2 senior residents in attendance one question. What was that question? Go here to find out...

www.ihs.gov/MedicalPrograms/MCH/M/documents/CaPPH41005.doc.

#2 March Medical Mystery follow-up

Who prescribed that really potent clomiphene in 1978?

In the March CCC Corner we posed this issue: a budding IHS infertility specialist above the Arctic Circle prescribed Clomiphene over the phone in 1978. The patient who benefited for this early telemedicine consultation went on to have 6 more children over the next 14 years. Clearly, an elegant maneuver.

Some CCC Corner readers correctly pointed out that the prescribing health care provider, who went on to work in the IHS for 24 years, was none other than Alan Waxman, MD.

Dr. Waxman served Indian women primarily at Gallup Indian Medical Center, after a 2 year rotation at Alaska Native Medical Center, and is now on the faculty at the University of New Mexico.

Your contributions?

If you have other illustrative clinical scenario(s) you would like to share in the Medical Mystery Tour, please contact nmurphy@scf.cc.

International Health Update

10.6 million children die before age five, and half a million women die in childbirth

WHO report calls for new approach to save lives of mothers and children

www.who.int/whr/2005/en/index.html

Neonatal survival: a call for action

One myth about NMR is the absence of cheap, effective interventions. In fact several low-cost interventions are effective in reducing mortality, including tetanus toxoid vaccination, exclusive breastfeeding, kangaroo mother care for low birth weight infants, and antibiotics for neonatal infections.

Martines J, et al Neonatal survival: a call for action. Lancet. 2005 Apr;365(9465):1189-97

Family Planning

Oral Contraceptives: Their Mode of Action and Dermatologic Applications

The choice of the optimal OC must take into account the patient's dermatological complaints (acne, hirsutism), health history (obesity, deep vein thrombosis, cardiovascular history, ovarian and breast cancer, migraine), age, and habits (smoking). As with any other drug, there are contraindications to oral contraceptives: smokers over the age of 35, history of thromboembolism, cerebrovascular disease, coronary disease, uncontrolled hypertension, hepatic failure, abnormal vaginal bleeding of unknown cause, focal migraine, and suspected or known breast cancer.

Pitashny M et al Oral contraceptives: their mode of action and dermatologic applications. Skinmed. 2005 Mar-Apr;4(2):101-6.

ACOG

Intrapartum fetal heart rate monitoring Summary of Recommendations and Conclusions

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

- The false-positive rate of EFM for predicting adverse outcomes is high.
- The use of EFM is associated with an increase in the rate of operative interventions (vacuum, forceps, and cesarean delivery).
- The use of EFM does not result in a reduction of cerebral palsy rates.
- With persistent variable decelerations, amnioinfusion reduces the need to proceed with emergent cesarean delivery and should be considered.

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

- The labor of parturients with high-risk conditions should be monitored continuously.
- Reinterpretation of the FHR tracing, especially knowing the neonatal outcome, is not reliable.
- The use of fetal pulse oximetry in clinical practice cannot be supported at this time.

Intrapartum fetal heart rate monitoring. ACOG Practice Bulletin No. 62. American College of Obstetricians and Gynecologists. Obstet Gynecol 2005;105:1161-69.

STD Corner

Laura Shelby, STD Director, IHS

After the promise: The STD consequences of "adolescent virginity promises"

The purpose of this study was to examine the effectiveness of virginity pledges in reducing STD infection rates among young adults (ages 18-24). Pledgers are consistently less likely to be exposed to risk factors across a wide range of indicators, but their STD infection rate does not differ from nonpledgers. Possible explanations are that pledgers are less likely than others to use condoms at sexual debut and to be tested and diagnosed with STDs.

Brückner H et al After the promise: The STD consequences of adolescent virginity promises Journal of Adolescent Health, Volume 36, Issue 4, April 2005, Pages 271-278

Young age at first sexual intercourse and sexually transmitted infections in adolescents

The authors examined the relation between age at first vaginal intercourse and a positive nucleic acid amplification test for sexually transmitted infection (STI). Younger ages at first intercourse were associated with higher odds of STI in comparison with older ages, but the effect diminished with increasing current age.

Kaestle CE et al Young age at first sexual intercourse and sexually transmitted infections in adolescents and young adults Am. J. Epidemiol. 161: April 2005 774-780

MCH Alert

Randomized controlled trial: Risk of Adolescent Suicide Screening Programs

Our findings can allay concerns about the potential harm of high school-based suicide screening.

CONCLUSIONS: No evidence of iatrogenic effects of suicide screening emerged. Screening

in high schools is a safe component of youth suicide prevention efforts.

Gould MS, Marrocco FA, Kleinman M, et al. 2005. Evaluating iatrogenic risk of youth suicide screening programs: A randomized controlled trial. JAMA, The Journal of the American Medical Association 293(13):1635-1643

American Family Physician

Hyperbaric Oxygen Therapy in Patients with Chronic Wounds

CLINICAL QUESTION: Does hyperbaric oxygen improve outcomes in patients with chronic wounds?

BOTTOM LINE: In patients with diabetic foot ulcers, hyperbaric oxygen therapy reduces the number of major amputations for up to one year. These data, however, are based on fewer than 200 patients among all six studies in the literature. (Level of Evidence: 1a-)

Breastfeeding

AAP Releases Updated Breastfeeding Recommendations

The American Academy of Pediatrics (AAP) has issued a revised policy statement on “Breastfeeding and the Use of Human Milk” that reflects new research on the importance of breastfeeding. This statement replaces the policy developed by the AAP in 1997.

Studies have shown that breastfeeding can decrease the incidence and severity of conditions such as diarrhea, bacterial meningitis, and ear infections. Some studies suggest that breastfeeding may offer protection against sudden infant death syndrome, obesity, diabetes, and asthma. Research also indicates that breastfeeding can be beneficial for the mother by possibly reducing the risk of ovarian cancer, breast cancer, and hip fractures and osteoporosis in the postmenopausal period. Other benefits include the potential to decrease annual health costs in the United States by \$3.6 billion; decreasing employee absenteeism; and reducing the environmental burden of disposal of formula cans and bottles and energy demands for production and transportation of formula.

Although breastfeeding initiation rates have increased steadily since 1990, the rate of exclusive breastfeeding (i.e., no water, juice, nonhuman milk, or food) has shown little or no increase. The proportion of infants who are breastfed exclusively until six months of age also has increased at a much slower rate than that of infants who received mixed feedings (i.e., breast milk plus infant formula).

American Academy of Pediatrics Breastfeeding Recommendations

- Exclusive breastfeeding is recommended for approximately the first six months; breastfeeding should be supported for the first year and beyond as long as mutually desired by the mother and child.
- The mother and infant should sleep near each other to facilitate breastfeeding.
- Self-examination of the mother’s breasts for lumps is recommended throughout lactation, not just after weaning.
- Physicians should support efforts of parents and the courts to ensure continuation of breastfeeding in cases involving separation, custody, and visitation.
- Adoptive mothers should be counseled on the benefits of induced lactation through hormonal therapy or mechanical stimulation.
- Physicians should recognize and incorporate cultural diversity in breastfeeding practices.
- A pediatrician or other knowledgeable and experienced health care professional should evaluate a newborn breastfed infant at three to five days of age and again at two to three weeks to be sure the infant is feeding and growing well.

Alaska State Diabetes Program

Barbara Stillwater

Waistline of one meter or more are at serious risk of insulin resistance

Waist circumference was a very strong independent predictor of insulin sensitivity. A waist circumference of less than 100 cm excluded insulin resistance in both sexes. It replaces body mass index, waist:hip ratio, and other measures of total body fat as a predictor of insulin resistance. Waist circumference is a simple tool to exclude insulin resistance and to identify those at greatest risk (therefore those who would benefit most from lifestyle changes).

Wahrenberg H, et al Use of waist circumference to predict insulin resistance: retrospective study. *BMJ*. 2005 Apr 15

Step Counting Increases Exercise More Than Timed Walking

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 CN, et al Comparison of walking recommendations in previously inactive women. *Med Sci Sports Exerc*. 2005 Apr;37(4):676-83.

There are 1440 minutes in a day—Make 30 of them active

There is a new International Definition for the Metabolic Syndrome. A person has the metabolic syndrome if they have central obesity (waist circumference > 94 cm for European men and > 80 cm for European women) plus any 2 of the following factors: increased triglyceride concentrations, reduced HDL cholesterol levels, increased blood pressure (systolic >130 mmHg or diastolic >85 mmHg), and increased fasting plasma glucose (>100 mg/dL [5.6 mmol/L]) or previously diagnosed type 2 diabetes. Definitions of obesity based on gender and ethnicity are provided.

Recommendations for treatment, including primary and secondary interventions and recommended strategies for the individual components of the metabolic syndrome, are given. International Diabetes Federation:

www.idf.org

Oklahoma Perspective

Greggory Woitte – Hastings Indian Medical Center

To VBAC, or not to VBAC, that is the question....

VBACs have once again come under fire and are the subject of controversy. ACOG updated its practice bulletin in July 2004. Highlights of the 2004 Practice Bulletin included selection criteria for VBAC candidates. Recently, the main insurer of physicians in Oklahoma decided to no longer cover the malpractice suits involving VBAC procedures as of December 31, 2004. Insurance companies appear to be weighing in on the debate in other states as well. As the pendulum about VBACs continues to swing, where do you stand? “Once a cesarean, always a cesarean” or “Trial of labor for all”. I suspect it is somewhere in the middle.

ACOG Practice Bulletin Number 54, Vaginal Birth after Cesarean Section

OB/GYN CCC Editorial

This is the first installment of what we hope will be a new regular Feature to share some of the issues of interest from the Oklahoma Area. We are grateful to Greggory Woitte, Hastings Indian Medical Center, for taking the time to

share this timely first issue with us.

Each local Indian Health system facility must decide how they can meet the ACOG recommended ‘immediately’ available personnel for emergency delivery. As symptomatic uterine rupture is an uncommon event, it is highly recommended that all Indian Health system facilities that provide obstetric delivery be prepared for an emergency delivery, regardless if it is a VBAC, or a shoulder dystocia.

One helpful method is for the entire L/D unit to perform periodic emergency delivery drills. PIMC recently reported on a successful approach to this in the March 2005 Midwives Corner.

Many facilities have incorporated other Emergency Delivery Drills on L/D to improve overall process issues. These drills have helped the whole team get used to the many process issues that only arise in a practical setting, e.g., not just on paper. These types of exercises can also be presented to JCAHO and other oversight agencies as a practical example of quality improvement.

Midwives Corner

Virginia Glifort, CNM, ANMC

Elective Cesarean Section; How informed is informed?

The national c-section rate has sky rocketed to nearly 25% of all births, although its widespread use has no documented outcomes. Elective Cesarean surgery for non-medical reasons is now available to women. The ethical dilemmas of Cesarean are perceived as involving confusion about what constitutes informed consent and exposure of women surgical risk. The midwifery model is presented as an alternative method for birthing considerations. This model encompasses health promotion, risk reduction and active family participation in prenatal care decision making.

Zeidenstein L. Elective Cesarean Section: How Informed is Informed? Online Journal of Health Ethics Vol. 1, No. 1 (2005)

Antibiotic Treatment for Bacterial Vaginosis Does Not Prevent Preterm Birth

Antibiotic therapy for bacterial vaginosis or *Trichomonas vaginalis* during pregnancy does not cut the risk of preterm birth according to the results of a systematic review. This finding runs counter to the conclusions reached by three previous findings. They are based on analysis of data from studies including 14 that were used in a meta-analysis.

Okun N et al Antibiotics for Bacterial Vaginosis or Trichomonas vaginalis in Pregnancy: A Systematic Review. Obstet Gynecol. 2005 Apr;105(4):857-868.

Domestic Violence

Upcoming Child Abuse Project

There are still a couple of slots open for this two year cycle of the IHS Child Abuse Project—a course in the medical evaluation of child maltreatment for physicians, nurse practitioners, and physician assistants in IHS and Tribal programs.

This is a very unique opportunity so please don't miss it!!

www.ovccap.ihs.gov

Jane Powers APRN, BC, MS

Virginia Glifort, CNM, ANMC

Herbs and the child-bearing woman: Guidelines for midwives

The use of herbs to promote health or treat disease has become popular, and midwives increasingly encounter questions from childbearing clients regarding herbs. This article provides an overview of key concepts regarding the incorporation of herbs into clinical practice and discusses the preparation and administration of herbal treatments for common concerns of pregnancy. Safety issues are emphasized throughout.

Belew C Herbs and the child-bearing woman. Guidelines for midwives.

J Nurse Midwifery. 1999 May-Jun;44(3):231-52.

(From Your Colleagues, continued from page 3)

required to report for GPRA. Tribal and urban operated facilities are not required but are highly encouraged to report on GPRA measures.

- GPRA reporting is linked to the annual budget request for IHS.
- The goal of GPRA is to improve effectiveness by promoting a strong focus on results, service quality, and customer satisfaction.
- You, as a patient of IHS, can ask your clinic/facility to see how it is doing on providing quality clinical care to its patients and to you.

George Gilson, Anchorage AI/AN Premature Delivery Rate Higher than the National Average

The AI/AN premature delivery rate exceeds the White rate by 15% (13.0 vs 11.0 - percent live births) The March of Dimes just released a new Prematurity Fact Sheet, 3/3/05, with helpful tables and figures for presentations.

Steve Holve, Tuba City Methamphetamine Use in Indian Country

Dr. Holve moderated an excellent discussion about Methamphetamine Use in Indian Coun-

try on the Primary Care Discussion Forum.

There was agreement that methamphetamine use is a major problem in most communities and only likely to worsen. The most difficult questions revolved around how to best screen prenatal patients (universal versus selected patients), the need for consent to test (informed individually or as a blanket policy) and the how to balance need for treatment against a judicial system that focuses on punishment.

Judy Thierry, HQE

Post GDM care at your site: Anything interesting? What more could be done?

From your individual perspectives, professional activities, and clinical practice populations can you give me some further information for when I go to the National Diabetes Educators Program meeting to represent IHS and gestational DM in our populations? The NDEP is still developing this initiative so nothing is set yet, but the focus will be preventing Type II diabetes in women after pregnancy when they had a diagnosis of GDM.

Judith.Thierry@ihs.gov

News Flash Should you be using the quad screen?

New Perinatology Corner Module
Prenatal Genetic Screening—
Serum and Ultrasound

Learn more at:

www.ihs.gov/MedicalPrograms/MCH/M/MCHpericnr.asp

Ask a Librarian

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

Vitamin C reduced premature rupture of the membranes (PROM)

A randomized trial assessed the outcomes of 120 pregnant women who were randomly assigned to take 100 mg of vitamin C or a placebo daily, starting in their 20th week of gestation. The researchers found vitamin C levels decreased in the control group and increased in the supplement group. PROM occurred in 14 of 57 pregnancies in the control group (25%) and only 4 of 52 pregnancies (8%) in the vitamin C group.

CONCLUSION: Daily supplementation with 100 mg vitamin C after 20 wk of gestation effectively lessens the incidence of PROM.

Casanueva E, et al *Vitamin C supplementation to prevent premature rupture of the membranes: a randomized trial. Am J Clin Nutr* 2005 April; 81(4): 859-863.

(Pelvic Floor Muscle Function, continued from page 1)

1. Bo, K, et al. *Evaluation of Female Pelvic-Floor Muscle Function and Strength, Physical Therapy.* 2005;85:3: 269-281
2. Kegel AH. *Progressive resistance exercise in the functional restoration of the perineal muscles. Am J Obstet Gynecol.* 1948;56:238-249
3. Constantinou CE, et al. *Contribution and Timing of Transmitted and Generated Pressure Components in the Female Urethra: Female Incontinence.* New York, NY; Allan R Liss, Inc; 1981:113-120
4. Hey-Smith E, et al. *Pelvic Floor Muscle Training for Urinary Incontinence in Women.* Oxford, United Kingdom: The Cochrane Library, The Cochrane Collaboration; 2001:3

OB/GYN CCC Editorial

I would like you to welcome Lois Goode, the new Chief Clinical Consultant for Physical Therapy. Lois points out several good points about the role of physical therapy in Women's Health. Please contact Lois for any question you have at Lois.Goode@ihs.gov

Cochrane Library postings on urinary incontinence

Authors' conclusions: Pelvic floor muscle training appeared to be an effective treatment for adult women with stress or mixed incontinence. Pelvic floor muscle training was better than no treatment or placebo treatments. The limitations of the evidence available mean that is difficult to judge if pelvic floor muscle training was bet-

ter or worse than other treatments. Most trials to date have studied the effect of treatment in younger, pre-menopausal women. The role of pelvic floor muscle training for women with urge incontinence alone remains unclear. Many of the trials were small with poor reporting of allocation concealment and masking of outcome assessors. In addition there was a lack of consistency in the choice and reporting of outcome measures that made data difficult to combine. Methodological problems limit the confidence that can be placed in the findings of the review. Further, large, high quality trials are necessary. Hay-Smith EJC et al. *Pelvic floor muscle training for urinary incontinence in women. The Cochrane Database of Systematic Reviews* 2001, Issue 1.

Authors' conclusions: The limited evidence available suggests that bladder training may be helpful for the treatment of urinary incontinence, but this conclusion can only be tentative as the trials were of variable quality and of small size with wide confidence intervals around the point estimates of effect. There was also not enough evidence to determine whether bladder training was useful as a supplement to another therapy. Definitive research has yet to be conducted: more research is required.

Wallace SA, et al *Bladder training for urinary incontinence in adults. The Cochrane Database of Systematic Reviews* 2004, Issue 1.

Breastfeeding Making Every Mother and Child Count — Through Breastfeeding, One Baby at a Time

La Leche League

International has produced a document demonstrating that breastfeeding is the cornerstone for life-long good health for mothers and children. In light of the fact that less than 35% of all infants around the world are exclusively breastfed even for the first four months of life,

Consider the following:

- 1) Exclusive breastfeeding for the first six months of life could save at least 1.3 million lives a year—that's about 3,500 children EACH DAY.
- 2) Breastfeeding provides invaluable immunological protection from a whole host of diseases—including ear infections, allergies, intestinal disorders, meningitis, Sudden Infant Death Syndrome (SIDs), diarrhea and pneumonia.
- 3) The health benefits of breastfeeding extend to the mother as well—lowering her risk of breast, endometrial, and ovarian cancer, osteoporosis and postpartum hemorrhaging.

Start Planning Now

2005 U.S. Public Health Conference/Global Health Summit

- Philadelphia, PA
- June 5–9, 2005. Development of the Report on Global Health.
- June 6–9, 2005. 40th Annual US Public Health Professional Conference.

For more information visit:

www.coausphsconference.org

IHS/ACOG. Postgraduate Course: Obstetric, Neonatal, and Gynecologic Care

- Denver, Colorado
- June 19–23, 2005

The basics of all AI/AN women's health, plus a good update.

Contact Yvonne Malloy at YMalloy@acog.org

or (202) 863-2580

National Summit on Preconception Care

- Atlanta, Georgia
- June 21–22, 2005
- Catalyst for national recommendations for preconception care, CDC.

Event Coordinator:

Keshia Jones at (404) 320-1818 ext. 224

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Some of the Articles Inside

Ob/Gyn Pediatrics CCC Corner

May 2005

Abstracts of the Month

- Pelvic Floor Muscle Function and Urinary Incontinence: A Role for Physical Therapy

IHS Child Health Notes

- Asymptomatic microscopic hematuria, community-acquired pneumonia in hospitalized school-age children
- Infant mortality statistics from the 2002 period: linked birth/infant death data set

From Your Colleagues

- Judy Thierry, HQE—Good Screening Tools for Substance Use: 5 P's or 4 P's
- Chuck North, Albuquerque Loss of bone mass is apparently reversed: Significant gains post DMPA discontinuation

Hot topics

- Obstetrics—Should we help patients decide on storage of umbilical cord stem cells?—Yes
- Gynecology—Testosterone patch effective in hypoactive sexual desire in surgically menopausal
- Child Health—To eat fruit and vegetables or not? Factors that influence consumers' decisions
- Chronic disease and Illness—Screening for Asymptomatic Bacteriuria: Recommendation Statement: USPSTF

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- International Health Update—10.6 million children die before age five, and half a million women die in childbirth
- Family Planning—Oral Contraceptives: Their Mode of Action and Dermatologic Applications
- ACOG—Intrapartum fetal heart rate monitoring; Summary of Recommendations and Conclusions
- STD Corner—After the promise: The STD consequences of "adolescent virginity promises"
- Breastfeeding—AAP Releases Updated Breastfeeding Recommendations
- Oklahoma Perspective—To VBAC, or not to VBAC....
- Midwives Corner—Elective Cesarean Section; How informed is informed?

