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Evaluation of a Chronic Pain Policy at a Rural Indian Health Service Clinic

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Abstract

The objective of this study is to evaluate a newly implemented chronic pain policy and the use of a chronic pain contract at a rural clinic. This study was approved by the Indian Health Service Institutional Review Board in Portland, Oregon. A retrospective chart review and satisfaction survey of consented patients with chronic nonmalignant pain who had been placed on the new chronic pain contract was performed. A satisfaction survey was also conducted for the patient's designated provider. The study results demonstrate that implementation of a chronic pain policy was beneficial to both the patients and providers.

Introduction

Chronic nonmalignant pain (CNMP) is a prevalent, costly, and often frustrating problem for both the patient and the health care system treating that patient. The World Health Organization estimates the prevalence of persistent pain to be from 5.5% - 33%.¹ This is a problem faced by nearly all providers worldwide, whether in a large urban setting or a smaller, remote setting. CNMP can have wide, sweeping effects on the health care system. There are many direct and indirect costs associated with chronic pain, including medications, physician visits, and lost wages for the patient and their caregivers.² The complex etiology of CNMP, the subjective nature of pain symptoms, and fears and controversy surrounding the use of opioids in CNMP can lead to uncertainty, frustration, and under-treatment.

Opioids are now more widely used in the treatment of CNMP than they once were. This relatively new, long-term use of opioids conjures up certain concerns. Addiction and abuse are just two concerns that providers deal with when initiating opioid therapy, especially in a patient with a history of substance abuse.³ Providers must make the difficult decisions about whom to treat and when to continue or terminate treatment. Perhaps the most difficult distinction to make is the one between a patient who is becoming addicted to his or her medication and one who is only reacting to under-treated pain. Aberrant drug taking behaviors can occur in both.⁴

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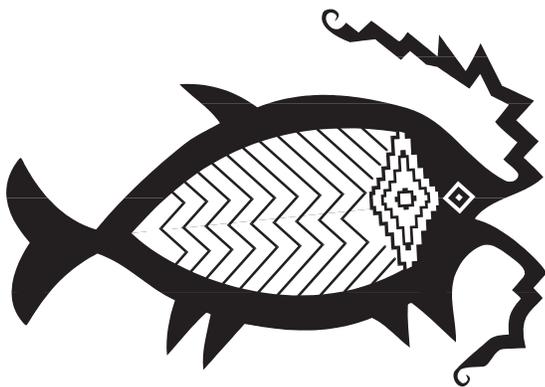
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Background

Warm Springs Health and Wellness Center (WSH&WC) is an Indian Health Service clinic serving Native Americans on the Warm Springs Reservation in Central Oregon. WSH&WC is not exempt from the issue of treating CNMP. WSH&WC is also not exempt from the public health concerns of abuse, dependence, and diversion of controlled substances within the community. Public health concerns also include the well being of the population; CNMP can have a serious detrimental effect on a patient's well being. The goal is to effectively manage pain while protecting the community. There are certain risk factors, present in all populations, that can help providers to identify those at increased risk for addiction. Risk factors for addiction include genetics, psychological illness, peer pressure, emotional distress, environmental stress, and sexual and physical abuse.⁵

With the challenges to be faced in treating CNMP, providers have developed some tools and guidelines in an attempt to provide better care to patients with CNMP. The use of a pain contract is one tool that has been widely used in the administration of substances with abuse potential. A pain policy, centering on the use of a pain contract, was implemented at WSH&WC in January 2004. The policy was initiated with the purpose of providing guidelines for management of CNMP. Its goal is to provide appropriate, effective, safe, and adequate pain control and to further improve the patient's quality of life and functional status. The pain policy intends to achieve this by:

- Increasing the patient's participation in management of their chronic pain condition;
- Providing guidelines for the most appropriate use of opioid analgesics for the treatment of pain;
- Helping distinguish the use of these drugs for legitimate purposes from their abuse as illegitimate drugs;
- Strengthening the ability of patients to communicate new or unrelieved pain; and
- Familiarizing patients with the available pain management options.



The policy identifies criteria for patients who would be candidates for a chronic pain contract. It also addresses documentation of pain and functional assessment (by both the patient and provider), the treatment of breakthrough pain, the treatment of acute injuries, documentation, surveillance, and breaches of contract (see Attachment 1).

Attachment 1. WSH&WC Chronic Pain Management Policy

BACKGROUND

Chronic Pain management can often present challenging and frustrating patient-provider encounters. There is a need for improved patient participation in the management of pain issues. In addition public health concerns regarding abuse, dependence and diversion of controlled substances warrant the need for improved management guidelines in prescribing such controlled substances.

PURPOSE

The purpose of the Chronic Pain Management Policy is to provide guidelines for management of nonmalignant chronic pain. These guidelines will assist medical professionals in providing appropriate, effective, safe, and adequate pain control for patients with nonmalignant chronic pain, with the goal of further improving their quality of life and functional status. This will be achieved by:

- Increasing the patient's participation in management of their chronic pain condition.
- Providing guidelines for the most appropriate use of opioid analgesics for the treatment of pain.
- Helping distinguish the use of these drugs for legitimate purposes from their abuse as illegitimate drugs.
- Strengthening the ability of patients to communicate new or unrelieved pain.
- Familiarizing patients with the available pain management options.

POLICY

Patients with non-malignant pain who use more than sixty doses of an opioid analgesic during a 28 day period for greater than two months will be treated using the following procedural guidelines.

PROCEDURE

1. Patients with chronic non-malignant pain who use more than sixty doses of an opioid analgesic during a 28 day period for greater than two months will be referred to their primary care provider to establish a Chronic Pain Management Contract.

2. Each patient requiring chronic narcotic therapy must choose a designated provider from the permanent medical staff if they do not have such an established relationship.
3. The patient/provider team will meet in a prescheduled appointment to sign a Chronic Pain Management Contract.
4. Patients identified as above should be converted to a long acting narcotic (methadone, Oramorph, or Duragesic patch) for treatment of pain.
5. Medications should be prescribed using the Pharmacy Chronic Pain PCC+ (Appendix D). Medications may be written for 3 months' duration with refill intervals of 7, 14, 21, or 28 days.
6. The Chronic Pain Management Plan will include but not be limited to those items identified in the Chronic Pain Management Contract (Appendix A)
7. The treatment plan will be placed in the front of the chart under the health summary.
8. Informed Consent for chronic treatment with controlled substance (Appendix B) will be reviewed with and signed by patient to address the risks associated with chronic narcotic use.
9. Patients will be given Chronic Pain Management folder containing:
 - A copy their personal Chronic Pain Management Contract (Appendix A)
 - A copy of the signed Informed Consent (Appendix B)
 - Five Activity Log sheets (Appendix C)
 - Five Pain Management Participation – Drug Effectiveness Diary sheets (Appendix E)
 - Two Therapy Attendance Logs (Appendix F)

PAIN ASSESSMENT

1. Pain assessment and documentation is the responsibility of both the patient and the provider.
2. The patient will be required to submit documentation of pain level using the daily pain management participation sheet (appendix E). These will be provided in their personal pain management folder and should be done at least one day weekly. Replacement sheets can be obtained in the pharmacy or medical clinic. This folder should be brought to clinic for each visit in which pain issues will be addressed
3. Pain assessment and management should also include patient feedback to gauge the adequacy of pain control and quality of life. Pain intensity will be assessed to help determine effectiveness of medications and therapies. The provider will document pain

intensity and relief indicated using the provided scale on the Chronic Pain Management PCC plus (Appendix G).

0 1 2 3 4 5 6 7 8 9 10

where 0 = no pain and 10 = the worst pain imaginable

FUNCTION ASSESSMENT

1. Patients with chronic pain may be at risk of developing increasing opioid consumption without objective improvement in functional status.
2. Subjective reports by the patient regarding ability to engage in work or other gainful activities should be supported by objective observations including physical therapy notes and demonstration of prescribed exercises.
3. The patient will be required to present documentation of activity to be reviewed by the provider. Activity Logs (appendix F) can be found in the Personal Pain Management folder. Replacement sheets can be obtained in the pharmacy or medical clinic.

TREATMENT OF BREAK THROUGH PAIN

1. If adequate pain control is not achieved, the long acting medication should be increased under the designated provider's supervision by 25 % until effective pain management is achieved. Weekly visits (every 7 days) may be required to establish a baseline.

TREATMENT OF ACUTE INJURIES

1. Immediate pain relief may be provided with no more than five doses of the short acting narcotic medication.
2. The long acting narcotic may be increased under a provider's supervision by 25% for a period of no longer than two weeks.
3. Alternate forms of therapy (e.g., physical therapy) should be considered.
4. The acute care provider will leave a copy of the acute care visit PCC in the patient's designated provider's mailbox and should discuss the case directly with the patient's designated provider.

DOCUMENTATION

1. The provider will keep accurate and complete records documenting pain level, function, and activity.
2. The Chronic Pain Management PCC plus form should be used for visits addressing specifically chronic pain issues

3. Any reasons for and changes in therapy and adverse effects should be documented.
4. Documented periodic reviews of chronic pain charts should be performed no less than every three months by the primary provider to reassess the treatment plan, the patient's clinical course, and outcome goals, with particular attention paid to disease progression, side effect, and emergence of new conditions.

SURVIELLENCE

1. Urine drug screens will be required for those patients taking opioid analgesics on a chronic basis.
2. The screens will be done at initiation of the chronic pain management contract and randomly (not more than monthly but least every six months). The test will screen for the following: Cocaine, amphetamines, barbiturates, opiates, and cannabiniods.
3. Pharmacist, providers or nursing staff will request urine drug screen randomly and at a minimum every six months.
4. The patient's designated provider should take action in case of a positive test according to the drug abuse guidelines (Appendix D).

BREACH OF CONTRACT

In the event of a breach of pain management contract, opioid analgesics may be discontinued.

In the event a patients wishes to change primary providers, the contract will become null and void.

EFFECTIVE DATE

January 1, 2004 until rescinded.

SCOPE AND EFFECT

All Clinical staff.

- Describe the use of adjunctive or supportive therapies for CNMP;
- Evaluate levels of satisfaction among patients and providers with the contract;
- Evaluate the need for additional resources in treating CNMP; and
- Evaluate whether the pain policy is being followed and if its goal is being met.

Population

Inclusion Criteria. All patients currently on a pain contract and those who have used a pain contract at any time since implementation of the pain policy in January 2004 were initially reviewed for study eligibility. Of these patients, only those who had started the pain contract by November 1, 2004 were recruited. This allowed for six months of data collection before and after contract initiation. Only those who signed consent forms to be in the study were included. Patients currently on chronic pain contracts were identified through a review of the contract file. Patients previously on contracts were identified through a review of Electronic Health Record (EHR) notes and drug utilization reports from the computer system.

Exclusion Criteria. Patients who refused consent or who passed away before study completion were excluded. Patients who had not started their contract by November 1, 2004 were also excluded.

Methods

Data were collected through chart review both in EHR and in the paper chart. Data were collected for six months prior to the date the contract was initiated and for six months after.

The patient satisfaction survey was conducted by asking the patient to complete the survey either during a visit to the pharmacy or by mail. The providers were also asked to complete a survey for each of their patients enrolled in the study. The surveys were a Lickert-type scale (1 = strongly agree to 5 = strongly disagree), and the most frequent answer for each question was identified.

Analysis

A descriptive analysis was performed after all chart reviews were complete. Objective data that were described included demographic data, documented risk factors for addiction, use of adjunctive therapy, documented aberrant drug behaviors, number of visits relating to pain, medications used, documentation (or lack thereof) of pain assessment by both the provider and the patient, and other data relating to the pain protocol. Areas for improvement were identified and noted.

Results

Twenty patients, with an average age of 48 years, consented to be in the study. Sixteen females and four males had varied diagnoses. The most common diagnosis was some type of chronic back problem, or chronic pain that resulted

Objective

The objective of this project is to evaluate the use of the pain contract at WSH&WC as it relates to patient care and to the health care system in place on the reservation. The goal of this evaluation is to determine the role of the policy in the overall treatment of CNMP. It will also evaluate the prevalence of supportive/adjunctive therapies for the patients on contract. This study aims to

- Describe the population of patients using the pain contract;
- Describe any changes in pain levels since the start of the pain contract;
- Describe any change in number of pain related visits to the clinic;

from an injury. Fibromyalgia, chronic pain syndrome, and both rheumatoid arthritis and osteoarthritis were other diagnoses found for these patients.

At the time patients were started on their respective contracts, 13 were using one of the formulary long acting pain medications (methadone = 7, morphine SR = 5, fentanyl patch = 1). Seven patients were using only short acting medications. At the end of the data collection period, the numbers had shifted slightly. Fifteen patients were using long acting drugs, with 11 (73%) of the patients receiving methadone. There were still five patients using only short acting drugs for control of their CNMP. Four of these patients had been given a trial on long acting drugs, but could not tolerate them for various reasons. These patients seem to be adequately controlled with only the short acting drugs and the therapy appears appropriate for these individual patients. One patient has not had a trial of long acting drugs documented and is a likely candidate for their use.

Seven patients had no documented risk factors for drug abuse or addiction. Of the remaining 13 patients, a history of abuse of other prescription drugs, illicit drugs, or alcohol were the most common documented risk factors. Of the seven patients with a history of illicit drug abuse (three had abused methamphetamine), all but one had documented abuse of either alcohol or other prescription drugs as well.

Aberrant drug behaviors were documented in eight patients (40%). Abnormal (positive or negative) urine drug screens (UDS) were the most common aberrant drug behavior, occurring in each of these eight patients. Some patients exhibited more than one behavior. Early refill requests (four patients), visits to the emergency room (three patients), and reports of lost/stolen drugs (three patients) were also noted.

Four (20%) patients had UDS results positive for non-contract drugs. One patient was positive for methamphetamine, one for cannabinoids, and two patients were positive for prescription drugs (methadone, oxycodone, propoxyphene) not prescribed to them by a WSH&WC provider. The positive methamphetamine UDS resulted in the termination of that patient's contract. The patient has since restarted a contract with increased restrictions. The other abnormal UDSs were discussed between the patients and their providers, but no changes in the contracts resulted. These four patients showed other aberrant drug behaviors and had documented risk factors for abuse. Two patients showed three other behaviors and had two and three risk factors respectively. The other two patients showed one or two other behaviors and one or two other risk factors.

Some form of adjunctive therapy was used in all patients. All patients were using some other non-narcotic prescription drug (gabapentin, nonsteroidal anti-inflammatory drugs (NSAIDs), muscle relaxers, lidocaine patches). Only six (30%) patients had documented counseling. This counseling would have occurred outside of the clinic, as there is no psychologist, psychiatrist, or community counselor within our building. Half of the patients had physical therapy documented

and a few patients also reported several other therapies from acupuncture to hot soaks in the local Kah-Nee-Tah resort hot springs. Most patients (70%) have had referrals to outside doctors – specialists for surgery, consultation, or counseling.

The number of visits relating to pain decreased in the six months following contract initiation as compared to the six months prior. There was a net decrease of 66 visits, or 38%. Twelve (60%) patients had a decrease, three (15%) had no change, and five (25%) had an increase in the number of visits relating to pain after signing the contract.

Documentation of pain and function was inconsistent. The policy states that the 0 - 10 pain scale will be one of the tools used to assess pain. The percentage of patients with pain level documentation on at least one visit increased from 40% to 75% once contracts were initiated. These documented levels were sporadic however, and not used at every pain visit. Function was assessed by the providers in written notes, but these were inconsistent in length and with the issues addressed.

The policy states that the patients also have a responsibility in documenting pain and functional ability. They are to complete pain effectiveness and activity logs at home and return these at visits with their provider. Patients were noncompliant with this aspect. Only five (25%) patients had evidence of these completed logs in their charts.

Satisfaction surveys were completed and returned by each patient in the study. Overall, the patients "somewhat agreed" with the following statements:

- Pain is better controlled
- I make fewer visits to the clinic
- I feel more involved in my pain management
- It is easier to communicate my pain to my provider
- My medication works for my pain

They had "no opinion" as to whether or not they feel they are treated differently than other patients at the clinic because they are on pain contracts. They "strongly agreed" that:

- It is easier to get refills
- I am satisfied with the contract overall

Some patients also provided comments. In general, the negative comments focused on the difficulty in getting appointments, while positive comments reflected the willingness of patients to explore alternative therapies and satisfaction with the provider-patient relationship.

Each provider completed a survey for each patient of his or hers that was enrolled in the study. There are five primary providers in the clinic and all are represented in the survey results. The providers "strongly agreed" with the following statements:

- The contract is a useful tool for this patient
- I am comfortable using a contract for this patient
- The contract decreases my workload
- This patient's pain is better managed
- Overall, I am satisfied with contract

They “somewhat agree” that:

- The patient is participating more in their pain management
- Formulary drug choices are useful for this patient

The providers “strongly disagreed” with the statement: The contract is too restrictive. Some of the providers’ comments included the need to work on our pain scale (“there are too many 10s”) and other comments were made about how the contract has made it easier to provide consistency for the patient regarding when medications will be provided.

In an informal survey, other providers within the clinic including triage nurses and dentists also commented that having a pain contract in place for individual patients has made it much easier to know when to prescribe pain medications or make appointments for those patients. The fact that patients on contracts can be easily identified through a quick look at the patient’s chart has made the message about availability of pain medication much more consistent.

Discussion and Recommendations

The Chronic Pain Subcommittee for the clinic met recently and discussed some of the following issues. These recommendations include things that have been discussed by the Subcommittee, but have yet to take effect.

Use of short acting versus long acting medication. The wording of the policy needs to be changed so that it is not a requirement that a patient uses long acting medications.

Pain/Function Assessment. Remove the requirement from the policy regarding the use of pain management participation sheets and daily activity logs by the patient. As the compliance with this aspect of the policy was so poor, all mention of these take-home logs may need to be removed. Only a handful of patients returned them and they do not appear to be a helpful tool for most of the patients.

Also, the use of the 0 - 10 pain scale needs to be revisited. The substitution of the Mankoski scale, which includes functional assessment, is an idea that has already taken hold in some areas of the clinic (see Attachment 2). Making this available in the triage rooms, provider rooms, and in the pharmacy would potentially increase the use of the pain scale. Consistency in the use of the scale and how it is presented should make the scale more useful in actually assessing a patient’s pain. The patient may be seen more often by the pharmacy staff than by their designated provider because the patient is coming to get refills of their contract medication in between visits to their designated provider. For this reason, pharmacy would be a good place to present the patient with the Mankoski scale and document the pain level at medication pick up.

Attachment 2. Mankoski Pain Scale

0	Pain Free	No medication needed
1	Very minor annoyance, occasional minor twinges	No medication needed
2	Minor annoyance, occasional strong twinges	No medication needed
3	Annoying enough to be distracting	Mild pain killers are effective (aspirin, ibuprofen, Tylenol)
4	Can be ignored if you are really involved in your work, but still distracting	Mild painkillers relieve pain for 3-4 hours
5	Can’t be ignored for more than 30 minutes	Mild painkillers reduce pain for 3-4 hours
6	Can’t be ignored for any length of time, but you can still go to work and participate in social activities	Stronger painkillers (Codeine, Vicodin) reduce pain for 3-4 hours
7	Makes it difficult to concentrate, interferes with sleep. You can still function with effort.	Stronger painkillers are only partially effective. Strongest painkillers relieve pain (morphine, Oxycontin)
8	Physical activity severely limited. You can read and converse with effort. Nausea and dizziness set in as factors of pain.	Stronger painkillers are minimally effective. Strongest painkillers reduce pain for 3-4 hours.
9	Unable to speak. Crying out or moaning uncontrollably – near delirium	Strongest pain killers are only partially effective
10	Unconscious. Pain makes you pass out	Strongest pain killers are only partially effective

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Urine Drug Screens. Everyone (providers, nurses, pharmacists) needs to remain vigilant about ordering random urine drug screens. Many patients did not have a baseline UDS done, but most have met the requirement that a UDS will be performed at least every six months.

Abnormal urine drug screens need to be addressed by the provider in EHR. This will avoid confusion over whether or not a patient is to continue the contract and communicate to anyone reading the record that the provider is aware of the abnormal result and any actions the provider has made in

response. A template for addressing abnormal drug screens might be useful as well as a note title assigned to it so that the note could be easily located.

Pain Template. A chronic pain template is under construction and could be useful in addressing multiple issues identified by this study, especially those of pain and function documentation. It would provide a consistent format for chronic pain visits and prompt providers to assess function and pain level each time. The template could be required or strongly encouraged for use at a chronic pain visit and could also benefit from its own note title.

Other Opportunities for Improvement

Medications prescribed. The patient who has not yet had a trial of long acting pain medication should be reassessed and converted to a long acting drug if appropriate. Remaining aware of patients that could benefit from long acting drugs is important.

Use of adjunctive treatment. If the patient is willing, more adjunctive care could be used. Counseling is an important part of treating CNMP. Patients need coping skills for a condition that they may have for the rest of their life, and the patient should address their own expectations for pain levels. Zero pain may not be a realistic goal for all patients. Counseling can be beneficial in these situations. It would be in the interest of the patients if the clinic could provide counseling within its walls.

Limitations

The limitations of this study include: small sample size, retrospective review design, and a recall bias for both patient and provider surveys.

Conclusion

Overall, it was found that the pain policy and use of a chronic pain contract has been useful at WSH&WC. Patients and providers alike are satisfied with the contract. Improvements to the policy will likely only make it more of an asset to patient care at the clinic.

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Correction

In the October 2005 issue of the *IHS Primary Care Provider*, the article entitled "Processing Federal Malpractice Tort Claims and Reporting to the National Practitioner Data Bank" (Volume 30, Number 10, pages 251 - 254) incorrectly stated that the IHS Risk Management Program is involved in the review and processing of tort claims filed against care

provided at Urban Indian Programs. Only claims involving IHS direct care sites and tribal facilities operating under P.L. 93-638 compacts or contracts are the responsibility of the IHS Risk Management Program. We regret any confusion this error might have caused.

Editor's Note: The following is a digest of the monthly Obstetrics and Gynecology Chief Clinical Consultant's Newsletter (Volume 3, No. 11, November 2005) available on the Internet at <http://www.ihs.gov/MedicalPrograms/MCH/M/OBGYN01.cfm>. We wanted to make our readers aware of this resource, and encourage those who are interested to use it on a regular basis. You may also subscribe to a listserv to receive reminders about this service. If you have any questions, please contact Dr. Neil Murphy, Chief Clinical Consultant in Obstetrics and Gynecology, at nmurphy@scf.cc.

OB/GYN Chief Clinical Consultant's Corner Digest

Abstract of the Month

Evidence does not justify routine use of Magnesium sulfate in mild pre-eclampsia (number needed to treat: severe pre-eclampsia = 71; mild pre-eclampsia = 385).

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

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

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

Baha M. Sibai, MD. Diagnosis, prevention, and management of eclampsia. *Obstetrics & Gynecology*. 2005;105:402-410.

OB/GYN CCC Editorial comment

Mild pre-eclampsia: number needed to treat = 385 in Western countries.

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

On the other hand, if only women with mild disease in Western countries are considered, 385 women would need to be treated to prevent one case of eclampsia (Sabai 2004). For this reason, some experts have recommended against anticonvulsant therapy in women with mild disease in Western countries (Sabai 2004, Sabai 2005).

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

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

From Your Colleagues Carolyn Aoyama, HQE

Excess cervical cancer mortality: marker for low access to health care in the poor.

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

American women in the South, Latina women along the Texas-Mexico border, Caucasian women in Appalachia, and Vietnamese American women.

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

Richard Olson, HQE

Please disseminate widely to IHS and tribal programs that the 3rd edition of the IHS Medical Staff Credentialing and Privileging Guide is now available on line at the URL below. This has been developed by Marty Smith, Claremore, and Michele Gemelas, Warm Springs, two of the credentialing experts in the IHS. It will be enormously helpful to individuals who provide this function at the Area or local facility level. Special thanks to Marty and Michele who have been working on this for much of the past year. www.ihs.gov/NonMedicalPrograms/nc4/Documents/reviseIHScredentialingguide.pdf.

Hot Topics: Obstetrics

Two handy "Best Practices" checklists are now available. The diabetes in pregnancy checklist can be found at <http://www.ihs.gov/NonMedicalPrograms/nc4/Documents/DMtool10705.doc>, and the hypertension in pregnancy checklist can be found at <http://www.ihs.gov/NonMedicalPrograms/nc4/Documents/HTNtool10705.doc>.

A call to end routine episiotomy: no maternal benefit. There is no maternal benefit from episiotomy, and in some cases postpartum injuries could have been averted had episiotomy not been routine. Limiting its use to fetal indications can reduce episiotomy rates to as little as 8 to 10 percent, but rates of less than 15 percent should be immediately realizable. Hartmann K, et al. Outcomes of routine episiotomy: a systematic review. *JAMA*. May 4, 2005;293:2141-8.

Gynecology

Have you ever had problems with a stenotic cervix? You probably already know this, but I just heard this tip on a recent ACOG Update cassette tape. This tip should apply to other procedures that require cervical cannulation, as well. They discuss two regimens of misoprostol (these can be done orally or vaginally): pre-menopausal: 200 mcg 8 -12 hours pre-

procedure; post-menopausal: start 2 days pre-procedure taking 200 mcg 48 hours pre- and a second 200 mcg dose 8 – 12 hours pre-procedure.

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

Child Health

Advanced skills practitioner not needed at uncomplicated, elective cesarean delivery.

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

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

Do pacifiers reduce the risk of sudden infant death syndrome? A meta-analysis found that several studies show a significantly reduced risk of SIDS with pacifier use, particularly when used during sleep. <http://www.aap.org/ncepr/sidsarticle.pdf>.

Features: American Family Physician Patient-Oriented Evidence that Matters

Low testosterone not linked with female sexual dysfunction.

Clinical Question: Is a low level of serum testosterone associated with low sexual desire in women?

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

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

Ask the Librarian: Diane Cooper, MSLS/NIH

All clinicians involved with Indian health are now invited: tribal, urban, IHS, including those not on the IHS Wide Area Network (WAN), now have desk-top access to full-text online clinical journals and other resources. The service is provided

through a special arrangement IHS has with the National Institutes of Health (NIH) library. Previously, only clinicians on the WAN could access the service. If you have WAN access, continue to use the library resources through <http://hsrl.nihlibrary.nih.gov>.

If you are not on the WAN, you can get access by entering a userID and password. To obtain your ID and password, contact your Indian Health Service Informationist, Diane Cooper, at (301) 594-2449 or e-mail Diane.Cooper2@ihs.gov. Your informationist is available to help you with literature searches, help you use the electronic resources, and work with you or your team on IHS projects where information is needed.

OB/GYN CCC Editorial comment

It has long been the dream of the Chief Clinical Consultants, and others in Indian health, to have a national virtual library resources for *all* clinicians who care for Indian patients, no matter how remote their facility. That dream just became a reality. This is a great resource. This service has been available to approximately one half of Indian health clinicians for the last year or so. It is now available to the other half as well. I use it every day and encourage you to also. Kudos to Diane Cooper, Terry Cullen, and the NIH staff.

Medical Mystery Tour

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

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

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

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

What is the accuracy of ultrasound in ruling out ectopic pregnancy? In our patient's case her hCG was increasing by 53 - 54% every 48 hours, which we now see can be quite normal. When her hCG was below 2000, the predictive value of an ultrasound can be as low as 40%. That means the chance her ultrasound was correct, for either intrauterine pregnancy or ectopic pregnancy, can be as low as 40%. With an hCG less than 2000, one will be wrong 4 out of 10 times. If ultrasound diagnoses were considered definitive, 4 out of 10 women might have unnecessary surgical intervention, perhaps with interruption of desired intrauterine pregnancies.

This is an area on the hCG curve where providers can be misled because in 48 more hours the HCG can be nearly 4000 and then the ultrasonographer will be able to demonstrate a heartbeat. It may be in this period that the patient received methotrexate therapy or a surgical interruption of a viable pregnancy. So the pearl is to carefully correlate the U/S and hCG findings. If the patient is clinically stable and adherent with follow up, then it can be appropriate to follow the patient with an hCG of 1800 for 48 more hours.

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

Some intrauterine signs are more definitive for miscarriage, e.g., a gestational sac that is greater than 16 mm on average in three dimensions, or a fetal pole that has no heartbeat on repeat exams. There can also be helpful adnexal findings: a mass distinct from the ovary, cardiac activity, gestational sac, fetal pole outside of the uterus. There also can be a tubal ring or doughnut sign within the adnexa. Please note that of these adnexal findings, only the finding of a heart beat in the adnexa is 100% sure.

Other suggestive U/S findings of ectopic gestation: (a) a thickened endometrium with absence of an intrauterine gestational sac, (b) a small echogenic ring structure in the adnexa that is clearly separate from the ovary, (c) presence of a live embryo and/or a yolk sac, (d) a rim of color around the ectopic ring structure and trophoblastic flow on color Doppler, and (e) presence of echogenic fluid in the abdomen suggesting hemorrhage

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

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

Navajo News Jean Howe, Chinle

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

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

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

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

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

Locksmith, GJ, Chin, A, et al. High compared with standard gentamicin dosing for chorioamnionitis: a comparison of maternal and fetal serum drugs levels. *Obstetrics and Gynecology*. 2005;105:473-9.

Oklahoma Perspective Greggory Woitte, Hastings Indian Medical Center

Shoulder dystocia is one of an obstetrical provider's worst nightmares. Being in attendance when a true shoulder dystocia is identified can be traumatic to the obstetrical personnel as well as the patient and her family. Having personally just experienced this obstetrical emergency, I thought that it could be educational. First we all know that shoulder dystocia is an unpredictable event. There are factors that are suggestive of the possibility, and every obstetrical provider should be aware of these risk factors. Two important risk factors that our patients often have are macrosomia and diabetes. It is well documented that as the fetal weight increases, the risk of shoulder dystocia increases. However, 50 -

60% of shoulder dystocias occur at a fetal weight less than 4000 g. Early induction for macrosomia does not decrease the number of shoulder dystocias, and in fact increases the number of cesarean deliveries.

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

OB/GYN CCC Editorial comment

I highly recommend that all staff who provide care for pregnant women in Indian Country attend and keep current with the Advanced Life Support in Obstetrics (ALSO) Provider Course. The skills-based learning would be ideal for the entire L/D team at your facility, or even if you provide just emergency delivery services. It is most helpful if all staff can take the ALSO Provider Course so we are all working with the same set of expectations. We recently had three ALSO Courses in the Navajo Area and routinely have courses 1 - 2 times a year in the Alaska Area. ALSO website for other availability, below.

In the meantime, we have just released a new module on our MCH web page about shoulder dystocia. You can use the module for free CMEs/CEUs, or use just as a great resource. <http://www.ihs.gov/MedicalPrograms/MCH/M/shdyst.cfm>.

Perinatology Picks George Gilson, MFM, ANMC

Medical management of early pregnancy failure.

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

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

Medical management of early pregnancy failure has been well studied over the last decade, but still has not become a

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

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

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

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

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

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

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

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

STD Corner

Lori de Ravello, National IHS STD Program

Daily suppressive therapy is recommended for HSV-2 seropositive individuals.

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

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

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

This a page for sharing “what works” as seen in the published literature, as well as what is being done at sites that care for American Indian/Alaskan Native children. If you have any suggestions, comments, or questions, please contact Steve Holve, MD, Chief Clinical Consultant in Pediatrics at sholve@tcimc.ihs.gov.

IHS Child Health Notes

Quote of the month

“The thing that impresses me the most about America is the way parents obey their children.”

The Duke of Windsor

Articles of Interest

Antibiotic treatment of children with sore throat. *JAMA*. 2005 Nov 9;294(18):2315-22. <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?CMD=search&DB=pubmed>.

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

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

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

Editorial Comment

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

have rare, but serious consequences. Each physician will have to balance these competing goals in his/her practice.

I would also recommend the British article for its brevity – only three pages including graphs. If only more writers could emulate their style.

Infectious Disease Updates. Rosalyn Singleton, MD, MPH

Pneumococcal disease in children: will serotype replacement erase the gains from PCV7?

Since introduction of pneumococcal conjugate vaccine (PCV7), reports have shown significant decreases in both invasive pneumococcal disease (IPD) and antimicrobial resistant IPD in children < 2 years, as well among persons from older age groups (presumably from decreased transmission). The December edition of *Vaccine* highlights Alaska’s experience through 2003. After vaccine introduction, vaccine-type IPD rates declined by 91% in Alaska Native children < 2 years old, and by 40% in adults. There was also a decline in IPD with decreased susceptibility to penicillin, erythromycin, or Septra. The one black cloud in this bright story is a recent increase in the rate of non-vaccine serotype IPD in Alaska Natives leading to an increase in overall IPD from 37% (2001-3) to 59% (2004-5) of pre-vaccine levels. Surveillance among Navajo/Apache children has not shown an increase in non-vaccine type IPD. Since 20 - 35% of IPD was non-vaccine type before vaccine, the decrease in overall IPD (60 - 70%) since PCV7 has not been as dramatic as Hib. However, PCV7 has been effective in preventing vaccine type IPD and we should optimize its use. The dilemma is whether an increase in non-vaccine type IPD will begin to erase the gains made against IPD through PCV7 use. Continued surveillance in Alaska and Navajo/Apache is critical to determine if these increases will persist or be seen in other areas. If so, we anticipate new pneumococcal conjugate vaccines with expanded serotype coverage (e.g., 9-valent), or vaccines based on antigens common to all pneumococci.

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

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

Recent literature on American Indian/Alaskan Native Health

Doug Esposito, MD

Restraint use among northwest American Indian children traveling in motor vehicles. *Am J Public Health*. 2005;95(11):1982-8. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=16195522&query_hl=1.

Editorial Comment

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

Passenger safety restraint use for both children and adults in the US has generally risen over time. This study suggests that the same trend is not being enjoyed by northwest American Indians. In fact, this is likely the scenario all across "Indian Country." There exists a critical need for effective intervention. Community based public education campaigns and child restraint laws appear to offer the greatest promise, but providers of medical care to AI/AN children should continue to rigorously address this issue in the clinic setting by way of anticipatory guidance. Every little bit will help, and is well worth the effort! For suggestions on what works, and a whole host of other extremely interesting and useful resources, please refer to the first link below. Although somewhat dated and related to unintentional injury in general, the 1999 CONACH Statement "The Prevention of Unintentional Injury Among American Indian and Alaska Native Children: A Subject Review" is still relevant. Other useful links are included.

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

The prevention of unintentional injury among American Indian and Alaska Native children: a subject review. Committee on Native American Child Health and Committee on Injury and Poison Prevention. American Academy of Pediatrics. *Pediatrics*. 1999;104(6):1397-9. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10585996&query_hl=6.

Injury mortality among American Indian and Alaska Native children and youth—United States, 1989-1998. *MMWR Morb Mortal Wkly Rep*. 2003 Aug 1;52(30):697-701. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12894055&query_hl=11

Motor vehicle crash fatalities by race/ethnicity in Arizona, 1990-96. *Inj Prev*. 2003;9(3):251-6. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12966015&query_hl=13

Pediatric motor vehicle related injuries in the Navajo Nation: the impact of the 1988 child occupant restraint laws. *Inj Prev*. 2002;8(3):216-20. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12226119&query_hl=3

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

Article

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

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

Editorial Comment

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

Ethical considerations in research with socially identifiable populations. *Pediatrics*. 2004 Jan;113(1 Pt 1):148-51. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14702468&query_hl=13.

Susceptibility to retinopathy of prematurity in Alaskan Natives. *J Pediatr Ophthalmol Strabismus*. 1994;31(3):192-4. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7931954&query_hl=3.



Announcements from the AAP Indian Health Special Interest Group
Sunnah Kim, MS

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

2006 CATCH Implementation Funds - Call for Proposals

The Community Access to Child Health (CATCH) Implementation Funds program supports pediatricians in the initial and/or pilot stage of developing and implementing a community-based child health initiative. Grants of up to \$10,000 are awarded each year on a competitive basis to pediatricians who want to initiate and develop a pilot project that addresses the local needs of children in the community. Pediatricians and pediatric residents are eligible to apply. Deadline: January 31, 2006

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

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 us to publicize (i.e., AAP website 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>.

The 11th Annual Elders Issue

The May 2006 issue of *The IHS Provider*, to be published on the occasion of National Older Americans Month, will be the eleventh annual issue dedicated to our elders. Indian Health Service, tribal, and Urban Program professionals are encouraged to submit articles for this issue on elders and their health and health care. We are also interested in articles written by Indian elders themselves giving their perspective on health and health care issues. Inquiries or submissions can be addressed to the attention of the editor at the address on the back page of this issue.

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Notes from the Elder Care Initiative

IHS and tribal facilities as durable medical equipment, prosthetics, orthotics, and supplies (DMEPOS) suppliers

Since January 1, 2005, IHS and tribal health facilities have been able to directly bill Medicare for durable medical equipment, prosthetics, orthotics, and supplies. This represents a new source for third party reimbursement for services already provided. Medlearn Matters issue MM3845 outlines the basic requirements for this program and can be found in the CMS publication <http://www.cms.hhs.gov/medlearn/matters/mmarticles/2005/MM3845.pdf>.

Medicare Part B payment of vaccines (Pneumovax, Influenza, Hepatitis B) and their administration provided by IHS/tribally owned and/or operated hospitals and hospital-based facilities.

Starting January 1, 2006, IHS and tribally owned and/or operated hospitals and hospital-based health facilities can bill Pneumovax, influenza, and hepatitis B vaccinations separately from the All-Inclusive Rate as Medicare Part B services. See the CMS publication <http://www.cms.hhs.gov/medlearn/matters/mmarticles/2005/MM3967.pdf>.

AI/AN Long Term Care Conference

The 2005 American Indian and Alaska Native Long Term Care Conference was held November 16 - 17 in Albuquerque, New Mexico. Over 200 attendees representing tribes from every Area and 25 states attended. The meeting was chaired by Liz Mueller, Vice-Chair of the Jamestown S'Klallam Tribe and co-chaired by Kathy Correa of the Laguna Rainbow Corporation with the assistance of a broad-based planning committee representing tribes, urban programs, AI/AN organizations, and federal agencies. The emphasis of the meeting was on the presentation of tribal and urban long term care programs and featured a site visit to the Laguna Rainbow House. The Second Annual AIAN Long Term Care Conference will be held in conjunction with the National Indian Council on Aging (NICOA) 30th year Biennial Meeting in Tulsa, Oklahoma, September 2006. A report on this year's conference and information for next year will soon be posted at www.aianlongtermcare.org.

From the Literature

Lifford KL, Curhan GC, Hu FB, Barbieri RL, Grodstein F. Type 2 diabetes mellitus and risk of developing urinary incontinence. *J Am Geriatr Soc.* 2005 Nov;53(11):1851-7.

This prospective, observational study of 81,845 women in the Nurses Health Study cohort asked about prevalence and severity of incontinence in 1996 and 2000 and evaluated the relationship to the prevalence and duration of diabetes mellitus (DM). The average age in 1996 was about 62 for women with DM, about 64 for women without.

Women with DM had about 25% higher prevalence of incontinence. However, women with DM had a much higher risk of severe incontinence (up to 80% higher) of the sort likely

to affect daily activities (leakage through clothing). Incidence (new onset) of severe incontinence was roughly double for those women with DM. Duration of DM increased the risk of new incontinence, so that women with DM of ten years or longer duration were half again as likely as women without DM (RR=1.47) to develop any incontinence and at 150% greater risk (RR 2.62) of severe incontinence. Women with microvascular complications of DM had over double the risk of developing any kind of incontinence.

Although obesity is a well recognized risk factor for incontinence, and the BMI values for the women with DM were, on average, higher than for those without, the relationship between DM and incontinence persisted when only non-obese women with and without DM were compared.

The high rates of diabetes in Indian Country make this study even more relevant in the Indian health system. Incontinence often goes unreported and severe incontinence can contribute to social isolation, depression, and functional impairment. How many of us would be eager to exercise in a social setting if we were worried about leaking through our clothing? And how many of us would raise this as an issue with our physician, PA, or NP if we were not asked? Asking about incontinence should be a routine part of care for older women (see "Preventive Care Guidelines for the Elderly" in *The IHS Primary Care Provider*, (May, 2003; Volume 28, Number 5, pages 103-106) and a routine part of our care for all women with diabetes.

Conferences and Training Opportunities

The Second Annual Alaska Palliative Care Symposium is scheduled for April 3 - 5, 2006 at the Captain Cook Hotel in Anchorage, Alaska. The conference will feature nationally respected palliative care speakers and the opportunity for health care providers to come together to share palliative care knowledge and resources. It is designed for physicians, NPs, PAs, nurses, pharmacists, social workers and other health care providers interested in palliative care.

The 2006 symposium includes plenary speakers Susan D. Block, MD and J. Andrew Billings, MD who are codirectors of the Harvard Medical School Center for Palliative Care. Ross Hays, MD, Professor in the Departments of Rehabilitation Medicine and Pediatrics at the University of Washington School of Medicine and Director of the Palliative Care Consulting Service at the Children's Hospital and Medical Center in Seattle will be the plenary speaker for a half-day session on April 5 on Pediatric Palliative Care. The program will feature both basic and advanced palliative care topics. Attendees will once again receive a tool kit that includes many books and other materials that allow them to easily consult palliative care resources when they return home.

For more information, go to www.palliativeak.org, or contact Karen Mitchell by telephone at (907) 729-4491, or e-mail kmitchell@anthc.org.

Major Subjects and Titles, Volume 30, January through December 2005

A

Arthritis

- Arthritis – Still the Quiet, but Painful, Potentially Devastating Crippler Nov

Asthma

- Implementing a Quality Improvement Initiative for Asthma Management Mar

C

Cancer

- Accuracy of Administrative Data for Tracking Preventive Services among American Indian Cancer Patients Aug
- Cancer Information Seeking Preferences Among Health Professionals Jul

D

Dental (See Oral Health)

Diabetes mellitus

- Attention is Good medicine Jun
- OKCIC Diabetes Prevention Camp (“Turtle Camp”) QI Project Summary Jul

Dietetics (See Nutrition and Dietetics)

Domestic Violence

- An Overview of the RPMS Domestic Violence Screening Exam Code And GPRA Reporting Oct

E

Eldercare (See Geriatrics)

Emergency Medical Services

- Ambulances for Tribal EMS Feb
- Emergency Department Internship Program Apr
- EMS from a Headquarters Perspective Feb
- EMS Medical Direction Feb
- EMS Medical Services for Children: A HRSA-IHS Interagency Agreement Feb
- IHS Rural Prophylaxis Mass Clinic Planning Committee Shares Lessons Learned in Partnering with their LEPC and Utilization of Volunteers Apr
- Mountain Plains Health Consortium: National IHS EMS Training Resource Feb
- The National Native American EMS Association Feb
- New OCPS Staff Office Established: Emergency Preparedness and EMS Feb
- Quantifying the Unmet Need in Tribal/IHS EMS: Synopsis of the 2001 Report Feb

ENT (See Otorhinolaryngology)

G

Geriatrics

- The Beers Criteria Jan
- The Case for Palliative Care May
- Chronic Disease in American Indian/Alaska native Elders May
- Evaluation of Medication Use in the Elderly at the Cherokee Indian Hospital
Using the Beers Criteria Jan
- Illness Prevention and Health Promotion for American Indian Elders May
- Palliative Care Services: A survey of Tribal Health Directors May
- Taking the Initiative on Elder Care May

I

Indian Health Service

- The Fiftieth Anniversary of the Indian Health Service Aug

Infectious Diseases (See also Sexually Transmitted Diseases)

- *Helicobacter pylori*: Findings in a Native American Population Mar
- IHS Rural Prophylaxis Mass Clinic Planning Committee Shares Lessons
Learned in Partnering with their LEPC and Utilization of Volunteers Apr

Informatics

- Accuracy of Administrative Data for Tracking Preventive Services among
American Indian Cancer Patients Aug
- Cancer Information Seeking Preferences Among Health Professionals Jul
- Clinical Reporting System (CRS) Update May
- Clinical Reporting System (CRS) Update Sep
- Your Cubby Can Keep You Up to Date Jul
- Help Us Establish a Free Electronic Patient Education Resource Center for I/T/U Oct
- A New, Quick and Easy Way to Find “Best” Clinical Articles: PubMed Queries Mar
- An Overview of the RPMS Domestic Violence Screening Exam Code
and GPRA Reporting Oct
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- What is GPRA and How does it Affect Me? May
- Your “New” Library Jan
- Suicide Reporting in RPMS Sep

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- All Terrain Vehicle Injuries in Children: A Hidden Epidemic Jul
- IHS Suicide Prevention Work Plan Sep
- Is Online training a Viable Option for IHS Injury Prevention Personnel? Jun
- Suicide Reporting in RPMS Sep

M

Malpractice (See Tort Claims)

Medical Informatics (See Informatics)

N

Nutrition and Dietetics

- Breastfeeding Duration and Prevalence of Overweight Among 4- to 5-year olds Apr
- Promotion of Healthier Beverages in Indian Communities Jun

O

Obesity (See Nutrition and Dietetics)

Oral Health

- Development of a Symbiotic Relationship with Remote First Nations Community Leading to Collaborative School-Based Oral Health Program Sep

Otorhinolaryngology

- Feasibility and Acceptability of an Intervention to Reduce Prevalence of Risk factors for Otitis Media in a Minnesota AI Population Apr
- The Tympanic Membrane: See It, Describe It, Treat It Aug

P

Pain

- Evaluation of Chronic Pain Policy at a Rural IHS Clinic Dec

Palliative Care

- The Case for Palliative Care May
- Palliative Care Services: A survey of Tribal Health Directors May

Patient Education

- Help Us Establish a Free Electronic Patient Education Resource Center for I/T/U Oct

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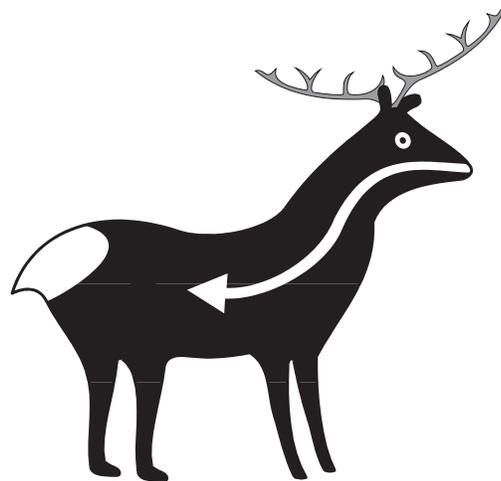
- All Terrain Vehicle Injuries in Children: A Hidden Epidemic Jul
- Breastfeeding Duration and Prevalence of Overweight Among 4- to 5 year olds Apr
- It's Time to Change the Way We View A Child's Growth Nov

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- Evaluation of Medication Use in the Elderly at the Cherokee Indian Hospital Using the Beers Criteria Jan
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- Promotion of Healthier Beverages in Indian Communities Jun
- Suicide Reporting in RPMS Sep



Q

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- OKCIC Diabetes Prevention Camp (“Turtle Camp”) QI Project Summary Jul
- What is GPRA and How does it Affect Me? May

R

Research

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Respiratory Diseases

- Implementing a Quality Improvement Initiative for Asthma Management Mar

S

Sexually Transmitted Diseases

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Substance Abuse

- “G” Methamphetamine on the Navajo Nation: A Film Documentary Jun

Suicide

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T

Tort Claims

- Processing Federal Malpractice Tort Claims and Reporting to the National Practitioner Data Bank Sep

Training

- Indian Health Training Network Sep
- Use of Internet-Based Evaluation Survey Tools Aug



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