THE IHS PRIMARY CARE PROVIDER

A journal for health professionals working with American Indians and Alaska Natives

April 1996 | Published by the IHS Clinical Support Center | Volume 21, Number 4

Esophagogastroduodenoscopy and Primary Care Physicians

Evaluation of a Rural Hospital EGD Program

David A. Yost, MD, Clinical Director; and Drake Rippelmeyer, MD, Director of Internal Medicine, Endoscopy Program Director; PHS Indian Hospital, Whiteriver, Arizona.

Introduction

Esophagogastroduodenoscopy (EGD) has been recognized as a useful procedure in the management of patients with upper gastrointestinal (UGI) disorders. Several reviews have examined EGD procedures performed by general internists and family physicians.[1,2] These reviews have found upper gastrointestinal endoscopy to be safe and effective when performed by primary care physicians.

The 40-bed Whiteriver Service Unit (WRSU) hospital has no intensive care unit (ICU) or surgical capabilities. Prior to 1992, all upper endoscopy services for WRSU patients were provided by specialists in Phoenix or Tucson, both more than 180 miles away. In 1991, the WRSU medical staff recognized the need for enhanced EGD services for the 15,000 patient service population. With the goal of establishing basic on site upper endoscopy services, one general internist (DR) with a multi-year contractual commitment to the IHS went to a major, private, midwestern gastroenterology group for two weeks of intensive training in EGD.

A used gastroscope was obtained as surplus from a large Veteran's Administration facility at no cost. Endoscopy policies and procedures were obtained from the American Academy of Family Physicians and were tailored to the needs of the WRSU, after deliberation with the consulting gastroenterologist at the Phoenix Indian Medical Center (PIMC). Training for nurses was provided primarily by the WRSU internist, with some assistance from the PIMC endoscopy staff. The total cost for equipment and training, including salary was $3,100.

In January 1992, after completing 50 supervised EGD procedures at private facilities with the midwestern group, privileging of the general internist was completed and on site endoscopy services began. This review examines the effectiveness of the resulting endoscopy program in improving health care for WRSU patients.

Methods

Contract Health Services (CHS) registers, emergency room logs, and transport logs were reviewed for the period January 1, 1991 through July 31, 1995. On site endoscopy logs, medical records, and biopsy reports were reviewed for January 1, 1992 through July 31, 1995.

In This Issue...

45 Esophagogastroduodenoscopy and Primary Care Physicians
47 Consultant Responds
48 The Art of Wellness
48 Training Opportunity for Cancer Support Group Leaders
49 Free Publication and Database Searches on Minority Health Topics
49 Meetings of Interest
50 NCME Videotapes Available
51 Native American Medical Literature

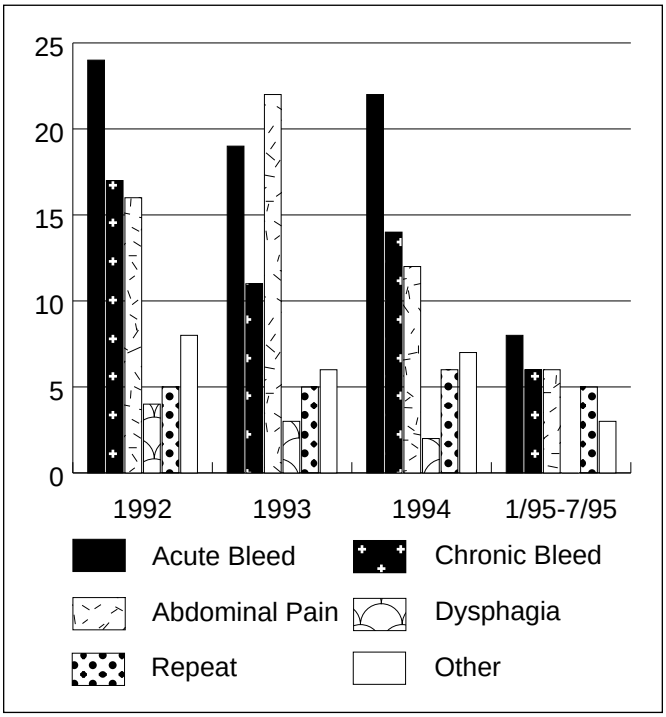
Results

In the absence of on site services, 33 patients were referred to outside facilities for EGD services in calendar year 1991. The PIMC was utilized whenever possible, but limited availability often forced the use of private facilities. Sixteen patients (48%) were flown emergently with the diagnosis of upper gastrointestinal bleeding. The average CHS expenditure (after third party reimbursement) for UGI bleeding patients, including air transport, was $9,300 per patient.

During the same year, 17 patients were scheduled for outpatient, elective upper endoscopy procedures. The show rate for the procedures was 53% (9/17). The average CHS cost per patient in this group was approximately $600.

From January 1, 1992 through July 31, 1995, 229 EGD procedures were performed at WRSU (Figure 1), with an average of 64 endoscopies per year. Seventy-three (32%) endoscopies were performed on inpatients admitted with acute UGI bleeding, 46 (20%) on stable outpatients as part of anemia/GI bleeding evaluation, 56 (24%) for evaluation of abdominal pain, and 9 (4%) for a complaint of dysphagia. Twenty-one (9%) EGDs were repeat procedures (second look), and 24 (10%) were performed for other indications (vomiting, feeding tube placements, bezoar removal, weight loss evaluations, etc.). Biopsies were obtained in 21% (48/229) of all cases, with six significant malignancies being identified.

Figure 1. Indications for esophagogastroduodenoscopy at the Whiteriver Service Unit, January 1992 through July 1995.



In the same period, a total of 16 patients were referred to tertiary facilities for acute UGI bleeding. Nine of these referrals occurred during times of unavailability of the WRSU endoscopist. Five referrals occurred after initial EGD at WRSU determined that the patient needed ICU/tertiary care services. Two patients were presented in shock and were immediately transferred for ICU care despite the potential availability of EGD at WRSU. Additionally, all six malignancies and four other complicated patients were referred to gastroenterologists for outpatient follow-up procedures.

One significant complication occurred. A 50-year-old female experienced acute dilatation and possible incarceration of an existing ventral hernia after overinsuflation related to an equipment failure. This patient was transferred to a tertiary facility for surgical care.

Discussion

As with most new services, increased utilization quickly followed enhanced availability. Average annual EGD rates from 1992-1995 were 94% higher than in 1991. Patients with UGI problems that would have been previously evaluated by contrast radiology, or who may have gone unevaluated, were referred for EGD. Previously referred patients who had refused Phoenix or Tucson appointments were now seen locally.

Establishment of on site EGD services appears to produce a significant reduction in outside referrals with parallel savings of CHS funding. Using 1991 referral patterns, approximately 42 emergent ([16/yr * 3.6 yrs] - 16 transports) and 51 outpatient ([17/yr * 3.6 yrs] - 10 referrals) referrals were avoided. Assuming 50% of patients have third party financial resources, the 21 inpatient CHS transports avoided saved approximately $195,000. Due to the low compliance rates and lower costs of outpatient referrals, savings in this category would only be projected at $7,200 (51 exams * .47 show rate * .50 CHS funded * $600/exam).

In addition to cost savings, patients benefitted substantially from increased availability, decreased travel time, the presence of family members, and the ready accessibility of nursing personnel fluent in the Apache language. In many cases, the patient's primary care physician observed or assisted with the endoscopy procedure, promoting continuity of care and enhanced patient/provider communication.

Quality management and competency assessments were provided through the individual review of each procedure by the WRSU Clinical Director, reviews of videotaped EGD procedures by the consulting gastroenterologist, and an annual visit to the PIMC where the WRSU internist performed EGD procedures directly observed by the gastroenterologist.

The complication rate during this study period was 0.44%, consistent with the low complication rates from larger reviews.[3] The single equipment-related complication occurred early in the first month of the program and was followed by over 220 successful, uncomplicated procedures.

Conclusions

With adequate training and equipment, esophagogastroduodenoscopy can be performed safely and effectively by primary care physicians at rural facilities. Used in a screening and diagnostic manner, on site endoscopy services can save CHS funds by assisting physicians in avoiding unnecessary patient transfers. In settings where previous endoscopy services were difficult to obtain, overall patient care is improved through additional services and better patient compliance with endoscopy referrals.

References

1. Rodney WN, Weber JR, Swedberg JA, Gelb DM. Esophagogastroduodenoscopy by family physicians phase II: a national multisite study of 2,500 procedures. *Fam Pract Res J.* 1993 Jun:13(2):121-31.
2. Hocutt JE Jr, Rodney WM, Zurad KG, Tucker, Norris T. Esophagogastroduodenoscopy for the family physician. *Am Fam Phys.* 1994 Jan;49(1):109-16, 121-2.
3. Newcomer M, Brazer SR. Complications of upper gastrointestinal endoscopy and their management. *Gastrointest Endosc Clin N Am.* 1994 Jul;4(3):551-70. ®

CONSULTANT RESPONSE ®

EGD and Primary Care Physicians

George E. Burdick, Gastroenterologist, Consultant for the Indian Health Service Phoenix Area, Phoenix, Arizona.

There is no question in my mind that upper gastrointestinal (UGI) endoscopy by a non-gastroenterologist can be a great asset to a rural community. Even then, endoscopy being performed by physicians who are not fully trained in Gastroenterology or Colon and Rectal Surgery is a controversial topic.

A certain minimum number of cases is required during the initial "learning curve." It is difficult to say how many cases must be done before the individual is truly competent, but certainly no less than 50 cases performed under direct supervision of a fully trained physician would seem to be an absolute minimum.

Six months of training in a high volume center where the individual can be supervised by a gastroenterologist would be optimal. This is, of course, impractical, and the approach taken by Yost and Rippelmeyer (this issue) seems to be reasonable. Anyone who is initially performing endoscopies with limited experience should be referring a large number of patients for further evaluation when appropriate. As experience is gained, the physician's expertise will steadily improve.

Having been a Director of a Gastroenterology Training Program, I would suggest a number of guidelines for individuals who wish to perform upper GI endoscopy:

1. It is to the learner's advantage to perform at least the minimum number of cases in a supervised setting. Cases should not be included if the individual is only observing another physician performing the procedure.
2. Be aware that complications are not uncommon. Learn how to avoid them, and be prepared to treat any complications that may arise.
   a. Perforation of the esophagus is usually associated with passage of the endoscope. Patients with cricopharyngeal dysfunction or a Zenker's diverticulum are at particular risk for perforation even in the hands of fully trained endoscopists.
   b. Medication reactions, most commonly over-sedation, are a common problem, particularly for the inexperienced endoscopist.
   c. Always be sure that adequate visualization is present before passing the endoscope. Variations in anatomy (particularly in the position of the stomach, para-esophageal hernias, and so on) may be particularly hazardous for the untrained physician.
   d. Whenever there is any question about the safety of a procedure or the condition of the patient, discontinue the procedure immediately.
3. Do not get involved in therapeutic endoscopy until extensive experience has been obtained with diagnostic evaluations.
4. The ability to perform UGI endoscopy, even if done very well, does not qualify any untrained individual to perform colonoscopy. This is a procedure with a significant complication rate even in experienced hands and would require further extensive training.

With modern video equipment, consultation via telemedicine will be an option in the near future. Cost, however, will probably limit general use of this technique for a long time.

If done carefully and thoughtfully, as described in this article, I would agree that having EGD performed by the primary care physician or surgeon can offer significant benefits in terms of convenience, quality of care, and cost-effectiveness, particularly in the rural setting. ®

The Art of Wellness

The Art of Wellness is a project targeting hard-to-reach older Native American women as recipients of health promotion messages through participation in a traditional art activity. The art of pottery making plays a significant role in the culture of Native Americans in the Southwest; for this reason, pottery was selected as the art medium for this project.

American Indian women over the age of 50 were invited to local community centers and chapter houses to discuss a variety of health topics, including breast and cervical cancer screening, and to build a group pot as a symbol of wellness. The women also painted cups as a personal reminder of the health messages they received.

A videotape (called "The Art of Wellness") was produced by Diefe and Associates for the Zuni Women's Health Project and the Indian Health Service (IHS) Cancer Prevention and Control Program in cooperation with the Centers for Disease Control and Prevention's and the New Mexico Department of Health's Breast and Cervical Cancer Detection Programs. The video describes a method of targeting a specific population: Navajo and Pueblo Indian women. However, it is relevant to other Native American groups and anyone else interested in communication through a traditional art process. The suggested audience for this video is anyone who is involved with health education, health promotion, or cancer screening programs in Native American communities or other communities where alternative approaches may be needed to reach special populations.

For more information, or to obtain a copy of the videotape, contact the IHS Cancer Prevention and Control Program, 5300 Homestead Road N.E., Albuquerque, NM 87110 (phone: 505-837-4132).

Training Opportunity for Cancer Support Group Leaders

The Indian Health Service (IHS) Cancer Prevention and Control Program will sponsor training for American Indian and Alaska Native people who wish to set up cancer support networks in their own communities. The training has been developed in collaboration with the People Living Through Cancer, Inc., and includes lecture and discussion sessions, access to education materials, and the opportunity to gain hands-on experience by participating in support groups in Albuquerque and the Pueblo of Santo Domingo, New Mexico. The ideal support group leader is either a cancer survivor, a survivor's family member, or a close friend who has shared the experience of having cancer.

The IHS Cancer Program is able to pay travel, tuition, and expenses for a limited number of people interested in attending such training. For more information, contact Roberta Paisano or Dr. Nathaniel Cobb at the IHS Cancer Prevention and Control Program, 5300 Homestead N.E., Albuquerque, NM 87110 (phone: 505-837-4132).

Free Publication and Database Searches on Minority Health Topics

Publications and database searches on minority health topics are available free from the Office of Minority Health Resource Center (OMH-RC), a nationwide service of the Office of Minority Health, U.S. Department of Health and Human Services. The center operates a toll-free line and maintains a computer database of information on books, programs, and organizations. Additionally, OMH-RC maintains subject files of articles on many topics, ranging from cancer to diabetes. All materials are mailed out at no charge to the caller. The center collects and distributes health information on African Americans, American Indians/Alaska Natives, Asian Americans, Hispanics/Latinos, and Pacific Islanders. To speak with an information specialist, call 800-444-6472, Monday through Friday, 9 a.m. to 5 p.m. Eastern Time (TDD: 301-589-0951; fax: 301-589-0884).

IHS/Tribal Nurse Educators
May 22-23, 1996 Albuquerque, NM

The third annual conference for Nurse Educators is scheduled to be held at the Ramada Inn Classic in Albuquerque. Nurse Educators (nurses who provide training, including orientation, inservice, and continuing education to nursing staff) employed by the IHS or the tribes, and other interested persons, are welcome to attend. It is recommended that those interested in attending begin *now* to identify funds to cover their transportation and per diem.

An agenda and registration materials is available from the IHS Clinical Support Center, 1616 East Indian School Road, Suite 375, Phoenix, AZ 85016 (phone: 602-640-2140; fax: 602-640-2138).

Advanced Operative Laparoscopy
June 3-4, 1996 Bethesda, MD

This two-day course in advanced gynecologic laparoscopy is designed to enhance the obstetricians' and gynecologists' experience and skills in the laparoscopic management of gynecologic problems. Included are seven hours of didactic instruction. The remainder of the time is devoted to two hands-on laboratory sessions in small groups to provide individualized experience and practice in performing laparoscopic surgery with the latest available equipment on the market and under development. Procedures to be performed include salpingostomy, salpingectomy, oophorectomy, and hysterectomy as well as management of potential intraoperative problems. **This training will be repeated August 19-20, 1996 and October 28-29, 1996.**

This activity is sponsored by the Uniformed Services University of the Health Sciences (USUHS). USUHS designates this activity for 13 credit hours in Category I of the Physician's Recognition Award of the American Medical Association. For more information, contact MSgt. Donald P. Dahlheimer, Supt., Department of Obstetrics and Gynecology, USUHS, 4301 Jones Bridge Road, Bethesda, MD 20814-4799 (phone: 301-295-6007).

National Human Subject Protection Project
June 3-5, 1996 Oklahoma City, OK

"Cultural Diversity and Other Human Research Issues with Emphasis on Native Americans" will focus on basic training for Institutional Review Board members and staff. Presentations will include a wide range of human subject protection issues in the conduct of research, including regulations and assurances, research protocols, informed consent, uses of special populations, ethical/legal issues, conflict of interest, and how to protect individual rights as well as the rights of communities, especially those of cultural diversity.

Sponsors are the National Institutes of Health, Office for Protection from Research Risks; the College of Public Health, University of Oklahoma Health Sciences Center; the Indian Health Service Office of Health Program Research and Development; and the Cherokee Nation of Oklahoma. For more information, contact Kay Holladay, MPH, Conference Coordinator, University of Oklahoma Health Sciences Center, College of Public Health, P.O. Box 26901, 801 Northeast 13th Street, Oklahoma City, Oklahoma 73190 (phone: 405-271-2342; fax: 405-271-3039; or e-mail to kay-holladay @uokhsc.edu).

Nursing in Native American Communities
June 18-19, 1996 Carlton, MN

The Bemidji Area Nursing Council is sponsoring "The Art and Science of Healing: Nursing in Native American Communities." Topics on the agenda include Alternative Care Practices, Women's Health Issues, Adolescent Care, Diabetes, AIDS, and Building Family Strengths. For more information, contact Kelly Eagle, RN, Center for American Indian Resources, 211 West 4th Street, Duluth, MN 55806 (phone: 218-726-1370; fax: 218-726-0501).

Tobacco Use Prevention
July 8-12, 1996 St. Louis, MO

The Second Annual Tobacco Use Prevention Summer Institute will offer eight courses in tobacco use prevention and reduction: Epidemiology and Evaluation, Tobacco Advertising, Media and Policy Advocacy, Coalition Building, Managing State/Local Programs, Tobacco Pricing, Environmental Tobacco Smoke, and Youth and Tobacco. These courses are designed for new and experienced professionals involved in state and local tobacco control programs, particularly programs designed to prevent tobacco use by youth, and will include background research, theory, and practical experience.

The sponsors are the Center for Health Promotion and Disease Prevention at the University of North Carolina - Chapel Hill and the Prevention Research Center at St. Louis University, in collaboration with the Centers for Disease Control and Prevention's Office on Smoking and Health. For more information, contact Ginger Morgan, Project Manager, University of North Carolina, Center for Health Promotion and Disease Prevention, Tobacco Use Prevention Training Program, Manning Drive, Campus Box #7595, Chapel Hill, NC 27599-7595 (phone: 919-966-5653; fax: 919-966-0973; e-mail: ginger_morgan@unc.edu).

Obstetrical Ultrasound
July 17-19, 1996

This three-day OB/GYN imaging diagnostic ultrasound course is specifically aimed at physicians in practice, first and second year OB/GYN residents, certified nurse midwives, and

nurse practitioners who wish to learn and improve their "basic" skills of performing and interpreting basic anatomic ultrasound examinations. Anyone who has been performing real-time ultrasound procedures for less than 24 months should benefit from participation.

This course includes three half-days of didactic presentation and discussion sessions and three half-days of supervised hands-on practical sessions in small groups. This permits the participants to perfect their skills and put into practice the measurements and calculations discussed in the didactic portion of the course.

This activity is sponsored by the Uniformed Services University of the Health Sciences (USUHS). USUHS designates this activity for 23 credit hours in Category I of the Physician's Recognition Award of the American Medical Association and for 27.6 contact hours of continuing education in nursing by the American Nurses Credentialing Center's Commission on Accreditation.

For more information, contact LT Tim Osborn, Continuing Health Professional Education, USUHS, 4301 Jones Bridge Road, Bethesda, MD 20814-4799 (phone: 301-295-3106).

NCME VIDEOTAPES AVAILABLE ®

Health care professionals employed by Indian health programs may borrow videotapes produced by the Network for Continuing Medical Education (NCME) by contacting the IHS Clinical Support Center, 1616 East Indian School Road, Suite 375, Phoenix, Arizona 85016.

These tapes offer Category 1 or Category 2 credit towards the AMA Physician's Recognition Award. These CME credits can be earned by viewing the tape(s) and submitting the appropriate documentation directly to the NCME.

To increase awareness of this service, new tapes are listed in The IHS Provider *on a regular basis.*

NCME #691

Alternative Medicine: When Your Patient Asks (60 minutes) It is estimated that more than 1/3 of the U.S. population utilizes unconventional medical therapy. What is your response when a patient asks about such interventions as acupuncture, visual imagery, and musculoskeletal manipulation? This program reviews the current state of medical research into the efficacy and safety of these and other alternative therapies, and will help you answer your patients' questions about non-traditional treatment with current and balanced information.

NCME #692

A Practical Approach to Fibromyalgia (30 minutes) The patient presents with diffuse muscle pain, fatigue, and widespread tenderness. When is this combination associated with the syndrome of fibromyalgia? Dr. Peggy Schlesinger offers practical advice for accurately diagnosing and effectively treating this challenging and often frustrating condition.

Thrombopoietin: Biology and Clinical Applications (16 minutes) Wider applications for high-dose chemotherapy and bone marrow transplantation, as well as AIDS-related and other clinical causes of thrombocytopenia have increased the demand for platelet concentrates. Fortunately, a new cytokine which acts to increase megakaryocyte and platelet production may be able to ease the strain on blood banks and reduce transfusion-related complications. Dr. Kenneth Kaushansky reviews the biology and therapeutic potential of this promising new cytokine.

NCME #693

Sleep Apnea: Recognition and Management in Primary Care (30 minutes) Sleep apnea is an under-recognized cause of increased morbidity from cardiovascular disease and stroke, and is a factor in decreased daytime performance. What are the signs and symptoms of sleep apnea? When should a patient be referred to a sleep laboratory? What treatments are available? Dr. Barry S. DiCicco provides answers to these and other questions regarding this disorder which occurs in 20% of the adult population.

Graft Versus Host Disease (8 minutes) As a sequela of allogenic bone marrow transplantation, graft versus host disease can result in significant morbidity for transplant patients. Dr. Evan R. Farmer discusses the various phases of this disease and its treatment.

Psoriasis in the Patient with HIV Disease (6 minutes) Psoriasis is usually severe when it develops in patients with HIV disease. Treatment is also complicated by the immunodeficiency in these patients. Dr. Madeleine Duvic explores the various therapy options available and the role of the dermatologist in the overall management of these patients.

The following is an updated MEDLINE search on Native American medical literature. At the end of each cited article, you will find a unique identifying (UI) number. For those of you who may wish to obtain a copy of a specific article, this can be facilitated by giving the librarian nearest you the UI number as well as the complete citation.

If your facility lacks a library or librarian, try calling your nearest university library, the nearest state medical association, or the National Library of Medicine (1-800-272-4787) to obtain information on how to access journal literature within your region. Bear in mind that most local library networks function on the basis of reciprocity and, if you do not have a library at your facility, you may be charged for services provided.

Valdes LJ 3rd. Salvia divinorum and the unique diterpene hallucinogen, Salvinorin (divinorin A). REVIEW ARTICLE: 35 REFS. *J Psychoactive Drugs.* 1994 Jul-Sep;26(3):277-83. 95147101

LeMaster PL, Connell CM. Health education interventions among Native Americans: a review and analysis. REVIEW ARTICLE: 61 REFS. *Health Educ Q.* 1994 Winter;21(4):521-38. 95146354

Thomson M. Otitis media. How are First Nations children affected? *Can Fam Physician.* 1994 Nov;40:1943-50. 95143978

Wilson R, Krefting L, Sutcliffe P, Van Bussel L. Native Canadians relocating for renal dialysis. Psychosocial and cultural issues. *Can Fam Physician.* 1994 Nov;40:1934-41. 95143977

Zubek EM. Traditional Native healing. Alternative or adjunct to modern medicine? *Can Fam Physician.* 1994 Nov;40:1923-31. 95143976

Macaulay AC. Ethics of research in Native communities [editorial]. *Can Fam Physician.* 1994 Nov;40:1888-90, 1894-7. 95143969

Michielutte R, Sharp PC, Dignan MB, Blinson K. Cultural issues in the development of cancer control programs for American Indian populations. *J Health Care Poor Underserved.* 1994;5(4):280-96. 95143365

Egeland GM, Perham-Hester KA, Hook EB. Use of capture-recapture analyses in fetal alcohol syndrome surveillance in Alaska. *Am J Epidemiol.* 1995 Feb 15;141(4):355-41. 95142085

Hoy W, Light A, Megill D. Cardiovascular disease in Navajo Indians with type 2 diabetes. *Public Health Rep.* 1995 Jan-Feb;110(1):87-94. 95140872

White BJ, Meyer C. Indian Child Welfare Act: what it means for nurses. *Kans Nurse.* 1994 Nov-Dec;69(10):1-2. 95139541

Stivers C. Drug prevention in Zuni, New Mexico: creation of a teen center as an alternative to alcohol and drug use. *J Community Health.* 1994 Oct;19(5):343-59. 95138302

Lisker R, Ramirez E, Penaloza R, Salamanca F. Red cell acid phosphatase types and GC polymorphisms in Merida, Oaxaca, Leon, and Saltillo, Mexico. *Hum Biol.* 1994 Dec;66(6):1103-9. 95137571

Pastor-Soler NM, Rafi MA, Hoffman JD, Hu D, Wenger DA. Metachromatic leukodystrophy in the Navajo Indian population: a splice site mutation in intron 4 of the arylsulfatase A gene. *Hum Mutat.* 1994;4(3):199-207. 95135451

Plawecki HM, Sanchez TR, Plawecki JA. Cultural aspects of caring for Navajo Indian clients. *J Holist Nurs.* 1994 Sep;12(3):291-306. 95130933

Parker JG. The lived experience of Native Americans with diabetes within a transcultural nursing perspective. *J Transcult Nurs.* 1994 Summer;6(1):5-11. 95127131

Heier JS, Uyemura M, Enzenauer RW, Enzenauer RJ, Waterhouse WJ. Vision loss in a woman of American Indian heritage. Vogt-Koyanagi-Harada (VKH) syndrome (uveoencephalitis). *Arch Dermatol.* 1995 Jan;131(1):83, 86. 95126661

Guerra F. The European-American exchange. *Pubbl Stn Zool Napoli [II].* 1993;15(3):313-27. 95125179

Hales CN. The pathogenesis of NIDDM. REVIEW ARTICLE: 50 REFS. *Diabetologia.* 1994 Sep;37 Suppl 2:S162-8. 95121778

Pettitt DJ, Bennett PH, Hanson RL, Narayan KM, Knowler WC. Comparison of World Health Organization and National Diabetes Data Group procedures to detect abnormalities of glucose tolerance during pregnancy. *Diabetes Care.* 1994 Nov;17(11):1264-8. 95121152

Cons NC, Jenny J. Comparing perceptions of dental aesthetics in the USA with those in eleven ethnic groups [corrected and republished in *Int Dent J.* 1994 Dec;44(6):489-94]. *Int Dent J.* 1994 Oct;44(5):489-94. 95113539

Change of Address or Request for New Subscription Form

Name_____

Title_____

Social Security No._____

New Address_____

City/State/Zip_____

Old Address_____

(Please include old label if possible)

Service Unit (if applicable)_____

Worksite: IHS ® Tribal ® Urban Indian ® Other ®

THE IHS PRIMARY CARE PROVIDER

The Provider is published monthly by the Indian Health Service Clinical Support Center (CSC). Telephone: (602) 640-2140; Fax: (602) 640-2138; e-mail: provide@ihs.ssw.dhhs.gov. Previous issues of *The Provider* (beginning with the December 1994 issue) can be found on the IHS health care provider home page (http://www.ihs.gov)

Circulation: *The Provider* (ISSN 1063-4398) is distributed to more than 6,000 health care providers working for IHS and tribal health programs, to medical and nursing schools throughout the country, and to health professionals working with or interested in American Indian and Alaska Native health care. If you would like to receive *The Provider,* free of charge, send your name, address, professional title, and place of employment to the address listed below.

Publication of articles: Manuscripts, comments, and letters to the editor are welcome. Items submitted for publication should be no longer than 3,000 words in length, typed, double-spaced, and conform to manuscript standards. IBM-compatible word processor files are preferred.

Authors should submit at least one hard copy with each electronic copy. Manuscripts may be received via the IHS Banyan electronic mail system. References should be included. All manuscripts are subject to editorial and peer review. Responsibility for obtaining permission from appropriate tribal authorities/Area Publications Committees to publish manuscripts rests with the author. For those who would like some guidance with manuscripts, a packet entitled "Information for Authors" is available by contacting the CSC at the address below.

Dept. of Health and Human Services
Indian Health Service
Clinical Support Center
1616 East Indian School Road, Suite 375
Phoenix, Arizona 85016

BULK RATE
Postage and Fees Paid
U.S. Dept. of Health & Human Services

Permit No. G-290

ADDRESS CORRECTION REQUESTED

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE $300