CREIGHTON MEDICINE

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Preventing End-Stage Renal Disease

by **Robert Dunlay, M.D.**

ASSISTANT PROFESSOR OF MEDICINE AND OF PHARMACOLOGY

Robert Dunlay, M.D.

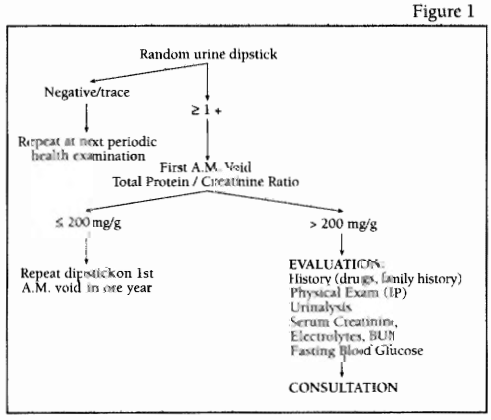
The major causes of end-stage renal disease in the United States include diabetes mellitus, hypertension and chronic glomerulonephritis.

Physicians are aware of the importance of diagnosing and treating hypertension. Although over half of the patients in the United States with essential hypertension know their diagnosis, only about half have satisfactory control of the blood pressure (<140/90).

The most common error we see in treating essential hypertension is not prescribing a diuretic. Hydrochlorothiazide in a dose of less than 50 mg/day or combined with a potassium sparing diuretic is safe and tolerated well by most patients. Special caution should be used in patients with systolic dysfunction, since this group tolerates hypokalemia poorly, and has an increased mortality even with low doses of diuretics. Diuretics are the initial drugs of choice in treating systolic hypertension in the elderly. Beta-blockers are less efficacious in this group and a calcium channel blocker might be chosen if a second medication is needed or diuretic is ineffective.

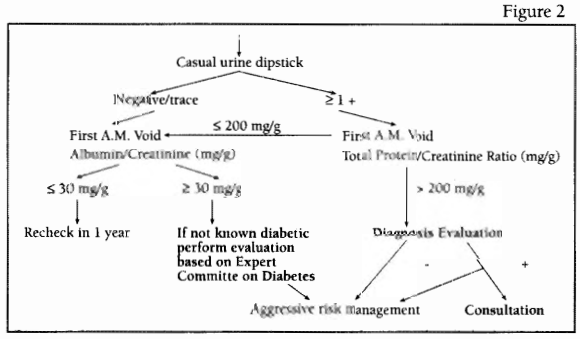
In the past two years, the National Kidney Foundation has begun a major new initiative encouraging physicians to screen patients for proteinuria. In a patient with no risk factors for renal disease, a 1+ protein on a routine urine dipstick should be followed by a urine protein/creatinine ratio (Figure 1). This should be performed on a first morning urine specimen to avoid evaluating patients with benign orthostatic proteinuria. A value >200 mg protein/gram creatinine (or a ratio > 0.2, if both protein and creatinine are expressed in milligrams, as is usually reported), indicates a need for a thorough evaluation.

Figure 1



Microalbuminuria indicates an increased risk for myocardial infarction and stroke, in addition to chronic renal failure. Microalbuminuria has been shown to increase the risk for cardiovascular and renal disease in patients with diabetes mellitus, hypertension, central obesity, advanced age, African-Americans, Pacific Islanders, Hispanics, Native Americans and those with a family history of cardiovascular or renal disease are also at risk. In these groups, even if the protein/creatinine ratio is normal, further screening for microalbuminuria should be performed (Figure 2).

Figure 2

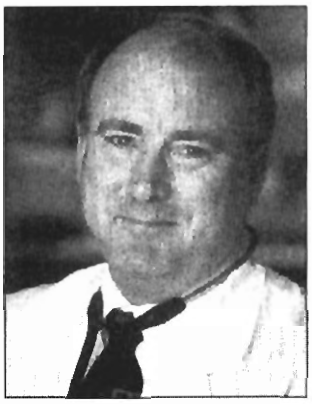


The blood pressure goal for patients with proteinuria or microalbuminuria should be <125/75, and all of the patients should be given a trial with an angiotensin converting enzyme inhibitor (ACE-I). Many patients, especially diabetics, will require at least three medications, but the risk for end-stage renal disease can be decreased.

If an ACE-I is tolerated poorly due to hyperkalemia or cough, an angiotensin II receptor blocker (AIIRB) should be tried. Studies

continued on page 7

From the Chair



Eugene Rich, M.D.

Almost five years ago, when I took on the role of Medicine Chair at Creighton, I met with the faculty to gain their insights regarding what they wanted Creighton Internal Medicine to become. The faculty's ideas helped the Associate Chairs, Division Chiefs and me as we formulated a general set of five-year goals to guide development of our clinical, educational and research missions.

Meeting with the entire faculty is a bigger job now than it was in April of 1996. Although my stated purpose for the meetings was "strategic planning." it was a pleasure and a privilege for me to refresh my acquaintance with the diverse group of highly intelligent, idealistic, and industrious individuals who comprise Creighton Internal Medicine. Although I meet regularly with some as Associate Chairs, Division Chiefs, or in the Center for Practice Improvement, others I see only occasionally in the elevators, in the clinic, or on rounds. At our recent meetings, each person had valuable new ideas about the strengths, weaknesses, and opportunities for Creighton Medicine.

These individuals have accomplished tremendous things over the past five years. Mission Based Management analyses show that we have indeed achieved high degrees of productivity in our various clinical practices. The "Report Cards" developed by Dr. Esterbrooks have guided effective quality management activities and have demonstrated that our physicians deliver a high quality of care. In education, we have substantially increased department leadership and involvement throughout all four years of the student curriculum and have initiated many new programs to enhance resident and student learning. In scholarship, we have sustained and grown our historically strong subspecialty research programs, as well as implemented strategies to promote scholarly activity in each subspecialty division.

The Internal Medicine faculty has accomplished much over the past five years, but it is clear from my meetings that they are hoping to do more. Some of the same old problems continue to plague us, most particularly maintaining an artful balance of excellence in clinical care, education and scholarship. Many new challenges confront us, including increased regulatory oversight of practice and research, space constraints on program growth, national shortages of graduates in key subspecialties, rapid changes in instructional technology. Nonetheless, it is clear from my meetings that our faculty is not only ready but eager to surmount these challenges.

Over the coming weeks I will be collating my notes from all the various meetings. The Associate Chairs, Division Chiefs and I will then draft proposed goals to be reviewed at department faculty meetings. I don't know for sure what goals our faculty will finally set to lead us in this first decade of the 21st century. However, I am certain they will be exciting and ambitious and will push us to achieve even greater levels of excellence as educators, clinicians, and scholars, true to the traditions of internal medicine at Creighton University.

Eugene Rich, M.D.
Tenet Professor and Chair
Department of Medicine
Director, Center for Practice Improvement
and Outcomes Research

Changes in Education Methods

by **Joann Derby, M.D.**
ASSISTANT PROFESSOR OF MEDICINE

Joann Derby, M.D.

The ability to teach a caring and skilled method of diagnostic and critical thinking and treatment plans has changed drastically from our old mentors in medical school, and thus requires new methods and tools.

Henry Sakowski, M.D., Assistant Professor of Medicine, has recently returned from a month-long facilitator-training course in Clinical Teaching at the Stanford University School of Medicine in Palo Alto, California. Entry into the program is very selective and competitive.

The curriculum consisted of both a core and resource basis. The core curriculum consisted of a series of seven 2-hour seminars that Dr. Sakowski will be presenting here at Creighton University. The subjects include: Learning Climate, Control of the Teaching Session, Communication of Goals, Promotion of Understanding and Retention, Evaluation, Feedback, and Promotion of Self-directed Learning.

Dr. Sakowski is currently presenting these sessions to the Internal Medicine Chief Residents. The group size for his program is limited to 6-8 participants. He plans on repeating the seminars for the General Internal Medicine faculty in the near future. Eventually the series will be offered to residents and other faculty in the Department of Medicine, with plans to offer the workshops to other faculty in the School of Medicine through the office of medical education.

New General Internal Medicine Faculty

The following physicians have joined the full-time faculty during the current academic year:

Joleen Fixley, M.D., Assistant Professor of Medicine, joined the Division in August after completing three years of Internal Medicine Residency here at Creighton University. She also received her M.D. from Creighton, and became Board Certified in 2000.

Steven Gonzalez, M.D., Associate Professor of Medicine, joined the Division in October 2000. He is a graduate of the Stanford University Medical School. He also received three years of Internal Medicine Residency at Stanford. Dr. Gonzalez was in private practice until he joined the U.S. Air Force in 1992. He retired from the Air Force in September 2000.

Jennifer Guss, M.D., Assistant Professor of Medicine and of Pediatrics, joined the Department of Medicine and the Department of Pediatrics in September 2000. She is a graduate of the George Washington University School of Medicine in Washington, DC. Dr. Guss completed a four-year Medicine Pediatrics Residency here at Creighton University. She is Board Certified in Medicine.

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Pillars, Past and Present

Joseph M. Holthaus, M.D. F.A.C.P., D.A.M.B., Dean Emeritus of the School of Medicine.

Dr. Holthaus graduated from the Creighton University School of Medicine in 1947. He later served two years as a Captain in the US Air Force, and returned to Creighton in 1952 to finish his Residency in Internal Medicine at Creighton and at the VA Hospital. Dr. Holthaus was Chief of Medicine at the VA for seven years and Chief of Staff at the VA for two years. He then returned to Creighton as Associate Dean of the School of Medicine in 1965. He served as Dean of our medical school from 1970-1980. After a year's sabbatical, Dr. Holthaus returned to the Gastroenterology Division as Professor of Medicine. He has served as Chairman of the Board of Directors of Saint Joseph Hospital for 10 years.

Why did you come to Creighton? I had every intention and expectation of going to Kansas University, since my uncle was on the faculty there. However, my father, in his wisdom, decided I needed to be placed under the watchful eyes of the Jesuit Fathers.

Who were the most influential teachers in your life? Other than my parents, Dr. Michael Bernreiter, my uncle, who was a cardiologist and actually my role model while growing up, and Dr. Hyman Zimmerman, Chief of Medicine at the Omaha VA Hospital, where I completed my residency. He was an exceptional diagnostician and a fine gentleman with great empathy for his patients.

What would be your advice to a newly qualified doctor? Medicine is a noble profession and will continue to be so regardless of all the recent changes and any changes that will surely continue to come in the future. Since these changes are on the horizon, stay alert and involved and be a leader in those groups most likely to be influential in designing the future of medicine.

Why did you pick Gastroenterology? Dr. Zimmerman, who was a superb gastroenterologist and hepatologist, had the greatest influence on my decision.

What have been your most interesting travels? I saw Japan right after World War II, and repeatedly in the '70s and '80s. It is almost breathtaking to see what can happen to a country and its people when its leaders make appropriate adjustments in their goals. Also a trip to Bavaria, my mother's birthplace, convinced me that God has indeed created a beautiful world for us.

How do you relax? Mixing clinical medicine and administrative medicine provides an on-going alteration of activities, which is relaxing for me. I also enjoy playing the flute, golfing, woodworking, gardening and playing public duplicate bridge.

What are you currently reading? Recently I have read *The New Harvard Dictionary of Music, A Year in Provence* and *The Path Between the Seas*. I am just beginning *The Brethren*.

What has been your greatest disappointment? When I was 40, I cried because I had not yet won a Nobel Prize. Now that I am facing retirement, I am due for another cry.

Division News

Allergy

submitted by M. Janet Barger-Lux, M.S.
Senior Research Associate in Medicine

Research reports

Recent work by **Thomas E. Casale, M.D.** Professor of Medicine, on anti-IgE monoclonal antibody in the treatment of asthma and seasonal allergic rhinitis appears as abstracts in recent issues of *Chest* and *Journal of Allergy & Clinical Immunology*.

Devendra K. Agrawal, M.D., Professor of Medicine, attended the XVII International Congress of Allergy and Clinical Immunology in Sydney, Australia, in October, where he presented a poster on the anti-allergic agent suplatast tosilate. He then traveled to Japan to give an invited lecture, "Anti-inflammatory Molecules in the Treatment of Bronchial Asthma," at the 5th Tokyo Allergy Symposium. Dr. Agrawal also spoke before gatherings of pulmonologists and allergists at two Japanese universities.

Robert G. Townley, M.D., Professor of Medicine, presented his most recent work on effects of *bacillus* Calmette-Guerin (BCG) on asthma and allergy at recent meetings of the American Academy of Allergy, Asthma, and Immunology and the American Thoracic Society.

Other news

Dr. Casale has been elected to serve three years on the Board of Directors for the American Academy of Allergy Asthma and Immunology.

Russell J. Hopp, D.O., Professor of Pediatrics and of Medicine, presented "Asthma, A Primer for Child Care Providers" at an October program sponsored by the Omaha Asthma Alliance. Later that month he spoke about food allergies at a UNMC educational conference.

Dr. Agrawal received the Man of the Year 2000 award from the India Association of Nebraska. This honor marks outstanding service to the Indian community and to the community at large.

Dr. Casale has been elected to the American Board of Allergy and Immunology for a six-year term. This Board writes the certification and rectification exam for the specialty of Allergy and Immunology.

Endocrinology

submitted by M. Janet Barger-Lux, M.S.

Presentations

Robert Anderson, M.D., Professor of Medicine and of Biomedical Sciences, presented an abstract, "Sulfation of thyroid hormones by multiple human recombinant cytosolic sulfotransferases," at the 11th International Congress of Endocrinology in Sydney, Australia in October. He then delivered the 278th Dr. Luis E. Geurrero Memorial Lecture, entitled "Hypopituitarism," at the University of Santo Tomas School of Medicine and Surgery in Manilla, the Phillipines.

Hong Win Deng, Ph.D., Assistant Professor of Medicine and of Biomedical Sciences, spoke on the genetic relationship of bone mineral density and hip fracture at the September meeting of the American Society for Bone and Mineral Research. His work showed that, while both BMD and hip fracture are highly heritable, there is little overlap. Thus BMD is a poor substitute for fracture in genetic studies, and the genes relevant to risk of hip fracture must reflect to *other* risk factors (e.g., risk of falling). This research garnered for Dr. Deng his second ASBMR Young Investigator Award.

Prema B. Rapuri, Ph.D., a postdoctoral fellow working with **J. Christopher Gallagher, M.D.** Professor of Medicine, is first author of

continued on page 6

What Can The Cardiac Center Do For Your Patient?

by **Lori Umberger, R.N., B.S.N.**
MANAGER OF CLINICAL SERVICES


Lori Umberger, R.N., B.S.N.

The mission of the Creighton Cardiac Center is to:

- Continue as a leader in cardiovascular care through education and research;
- Maintain uninterrupted access to our services for referring physicians and for patients;
- Provide cardiovascular care in a safe environment which is clinically effective, convenient and cost-effective;
- Never sacrifice quality care for cost considerations.

The following patient scenario is an example of what The Cardiac Center is all about.

As Dr. Smith was evaluating Mr. Jones, a 55 year-old white male smoker from rural Iowa, he heard a murmur and an irregular heart beat. Dr. Smith called The Cardiac Center to schedule Mr. Jones for an echocardiogram and a Holter monitor.

Our toll-free phone line, 1-800-237-7823 (CDR-STAT which stands for cardiac doctor—now), for referring physicians, is staffed from 7:30 a.m. - 5:00 p.m. by cardiac nurses who assist referring physicians and patients in scheduling cardiac evaluations and testing. Calls received after 5:00 p.m. are directly answered by the cardiologist on-call.

The reading cardiologist calls Dr. Smith with the patient's abnormal echocardiogram interpretation report. Minimal aortic stenosis was noted with a 25% left ventricular ejection fraction.

The Noninvasive Lab

- Performs 9300 studies per year.
- Is directed by **Jeff Holmberg, M.D., Ph.D.**, Assistant Professor of Medicine, and is staffed with registered cardiovascular sonographers who perform quality imaging studies with state of the art equipment.
- These studies include:
  - o stress echocardiograms (including pharmacological);
  - o M mode 2D and color Doppler transthoracic echocardiograms;
  - o transesophageal echocardiograms;
  - o renal/abdominal Doppler studies;
  - o carotid Doppler studies;
  - o peripheral vascular imaging including ankle brachial indices.

The reading cardiologist notifies Dr. Smith that Mr. Jones's Holter monitor report showed episodes of atrial fibrillation with a ventricular rate of 40 bpm and occasional 6-second pauses. The patient reported correlating symptoms of SOB and vertigo. The reading cardiologist recommended Coumadin therapy for Mr. Jones.

24-Hour Holter Monitoring and Event Recorder Services Creighton Transtelephonic Arrhythmia Network (CTAN)

- are available at The Cardiac Center for patients seen in our Omaha, Columbus and 16 other rural outreach clinics;
- performs 1895 studies per year;
- Event Recorder Service is directed by **Tom Hee, M.D.**, Associate Professor of Medicine, and the Holter Monitor Service is directed by **Karen Rovang, M.D.**, Assistant Professor of Medicine, and is staffed with trained technicians who evaluate and classify the patient's rhythm plus an overread by a cardiologist;
- classifies the event recorder rhythms as:
  - o Benign = patient instructed to record when symptoms occur
  - o Rhythm of Concern = cardiologist notified and orders intervention, if necessary;
  - o Life Threatening = patient will be kept on the line while another technician activates the patient's local EMS system. Cardiologist and ordering physician are also contacted immediately.

Dr. Smith calls The Cardiac Center to schedule Mr. Jones for a full cardiac evaluation. The CDR-STAT nurses review the schedule and confirm with Dr. Smith that his patient will be seen the following day for a one-hour cardiac consultation. Dr. Smith also requests a CXR, EKG, and lab work be done during this visit.

Mr. Jones presents to The Cardiac Center with vertigo, SOB, S3 heart sound, fatigue, ejection fraction 25%, BMI 30. Dr. Smith has also recently placed the patient on Coumadin for the newly identified atrial fibrillation.

After evaluating Mr. Jones, the cardiologist calls together the interdisciplinary team at The Cardiac Center to meet the needs of the patient. The patient could benefit from the following services:

Congestive Heart Failure Clinic

- Averages 90 active patients per year.
- Is directed by Dr. Holmberg and coordinated by **Barbara Goines, R.N., B.S.N., A.P.R.N.**, Nurse Practitioner,
- Utilizes functional class I-IV protocols developed by the CHF team
- 1.1% 30-day readmission rate
- 8.9% 1-year readmission rate
- 3.4% mortality rate
- Outcome data include the quality of life measurements, six-minute walk test, and symptom measurements.

Therapeutic Monitoring Clinic

- Averages 260 active patients per year
- Is directed by **Amy Arouni, M.D.**, Assistant Professor of Medicine, and staffed by two registered nurses
- Assists the physician in the management of patients placed on short or long-term anticoagulation therapy
- Manages patients according to national standards and approved protocols under the direction of the cardiologist and ordering physician
- Utilizes a small sample of capillary blood to produce results in 2 minutes

continued on page 5

Heritage in Medicine

from the Editor

"The practice of medicine is a commitment to the highest standard of excellence and a total commitment to serve humanity..." is a message that reverberates throughout the history of medicine.

These standards in modern medicine are defined as professionalism. **Eugene Lanspa, M.D.** personified professionalism and I am honored to bring you his definition of professionalism, as paraphrased by his son, Stephen Lanspa, M.D., at the 41st annual Bergan Mercy Auxiliary Candlelight Ball.

"...Direct your focus to what the patient thinks is important, not what you think. There are four things you've got to do:

First, between you and your patient, skip the differences that should not count—the patient's dress, speech, religious beliefs...put it aside;

Second, it's okay to risk your other relationships and your own well-being for your patients. It's more than okay, it's expected. Your family and friends will understand.

Third, compassion is good but what counts is to be compassionate enough to DO SOMETHING when you see pain. Acknowledge, respond and relieve your patient's distress.

Fourth, be tough enough to get the science right. Act within your competencies, work to make your clinical judgement better.

The Catholic part of the lesson was that you must never take away hope from your patient..."

Dr. Lanspa graduated from the Creighton University School of Pharmacy in 1951, and from its School of Medicine in 1955. A member of the American Academy of Family Practice, he was a Clinical Instructor in Medicine at Creighton University, having been on the faculty since 1957. Board Certified in Family Practice in 1973, Dr. Lanspa practiced medicine in Omaha for over 40 years.

Eugene Lanspa, M.D.
June 20, 1927 - September 20, 2000

Further evidence of the Lanspa family loyalty and dedication to Creighton University is the fact that two of his sons, Stephen and Thomas, are graduates of Creighton.

Stephen received his medical degree in 1978, and Thomas, graduated with a batchelor of science degree in 1979 and received his medical degree in 1983.

Both are members of the faculty of the Department of Medicine in the Creighton University School of Medicine.

In this era when medicine is being transformed into a business, Dr. Eugene Lanspa's altruistic vision may seem antiquated, yet it is very refreshing and inspirational.

What Can The Cardiac Center Do For Your Patient?

continued from page 4

- Keeps the PT/NR in the appropriate range
- Minimizes adverse events (adverse events per patient/month = 3.25%)
- Assists the physician in the management of patients placed on amiodarone therapy by facilitating, tracking and evaluating follow-up blood tests, PFTs, and x-rays
- Provides consistent and close patient follow-up
- Educates the patient regarding their disease process while improving patient compliance

After patients are evaluated, the cardiologists and staff screen patients to see if they meet criteria for the numerous drug research projects ongoing at The Cardiac Center. Mr. Jones would meet protocol criteria for the SPORTIF V research study. This double-blind study is for patients receiving Coumadin or a new anti-coagulation drug, which is reported to have less food/drug interaction and a shorter half-life, thus requiring less patient monitoring and adverse events.

Research Clinic

- Enrolls 650 patients per year
- Is directed by **Aryan Mooss, M.D.**, Professor of Medicine, and staffed with a pharmacist, a research fellow and four registered nurses
- Has 20-25 active clinical trials ranging from endothelial dysfunction to acute and post-myocardial infarction studies
- Has 10-15 clinical research studies designed and developed by The Cardiac Center medical staff
- Has future plans for outcomes research

Risk Factor Management Clinic

- Is directed by **Antonio Reyes, M.D.**, Assistant Professor of Medicine, and **Mark Williams, Ph.D.**, Professor of Medicine
- Supported by a registered dietitian, exercise specialists, and four registered nurses
- Assists the referring physician in the management of patients with obesity and associated co-morbidities
- Screens for anti-obesity drug therapy candidates
- Prescribes an individualized exercise program
- Provides nutrition consultation with close dietary follow-up
- Evaluates the lipid status of the patient
- Refers patients to our stress management and smoking cessation programs

continued on page 8

Division News

continued from page 3

a paper that has drawn media attention. In the November issue of the American Journal of Clinical Nutrition, she reports a relationship between moderate alcohol consumption (equivalent to about 3-5 drinks/week) and higher bone mineral density in older women, with the biochemical markers that point to the underlying mechanism. Another paper by Dr. Rapuri, in the September issue of *Bone,* examines the deleterious effect of smoking on BMD in older women.

Robert C. Recker, M.D., Professor of Medicine and Clinical Professor of Periodontics, spoke at the October meeting of the American Society for Reproductive Medicine in San Diego. He also lectured to attendees of the 8th World Congress of Gynecological Endocrinology in Florence, Italy in December. Drawing from his work on low-dose hormone replacement in elderly women, Dr. Recker explored optimization of HRT in both presentations.

Other news

Dr. Recker was named a Master of the American College of Physicians. The mastership is awarded to those who have achieved professional distinction in the care of patients, in academic achievement and in professional and ethical standards.

Marc S. Rendell, M.D., Professor of Medicine and of Biomedical Sciences, is first author of a report in the *International Journal of Surgical Investigation* on the effect of high blood pressure on wound healing. In the November 1 issue of *JAMA,* a multicenter group including Dr. Rendell reported on methodological issues that affect diabetic neuropathy trials in the context of a treatment trial of recombinant human nerve growth factor. Diabetic neuropathy is one of Dr. Rendell's leading clinical interests.

The 2nd annual meeting of the Great Plains States Society for Molecular Biology and Genetics was held on May 21-22 in Omaha. Nearly 300 attendees heard presentations on the molecular basis of steroid hormone action, HIV, plant and animal genetics, neurocord defects, mutations within genomes, and the molecular basis of hearing loss. The program included lectures by internationally recognized authorities, posters, and an event at the Henry Doorly Zoo. **Mark L. Johnson, Ph.D.,** Associate Professor of Medicine and of Biomedical Sciences, founded the Society.

Gastroenterology

submitted by **Stephen Lanspa, M.D.**
PROFESSOR OF MEDICINE AND OF PREVENTIVE MEDICINE AND PUBLIC HEALTH

Jeremiah Donovan, M.D., Professor of Medicine and consultant in gastroenterology, was elected to the Creighton Faculty and Academic Councils. His term is effective August 21, 2001 to August 20, 2003. He is in his second year at Creighton University and brings a wealth of experience in teaching, research and clinical and community service.


Gregory J. Schafer, M.D.

General Internal Medicine

submitted by **Joann Derby, M.D.**

Gregory J. Schafer, M.D., Assistant Professor of Medicine, has joined the Division of General Internal Medicine, effective February 1, 2001. He had been in private practice in Columbus, Nebr. since 1990. Dr. Schafer is a 1987 graduate of the Nebraska College of Medicine, where he also completed three years of Internal Medicine Residency.

Dr. Schafer is sharing space at The Cardiac Center of Creighton University at Columbus, Nebraska.

SGIM 24th annual meeting May 2-5, 2001

J.D. Bramble, Ph.D., Assistant Professor of Pharmacy Sciences, gave a poster presentation entitled, "The Treatment of Alcohol and Drug Related Diagnosis in a Teaching Hospital: Resource Use and Efficiency," during the meeting of the Society of General Internal Medicine in San Diego, CA. This project was co-authored by Dr. Bramble, **Dennis Esterbrooks, M.D.,** Associate Professor of Medicine, and of Radiology, Dr. Rich and Dr. Sakowski.

Bruce Houghton, M.D., Assistant Professor of Medicine, participated in an Interest Group discussion entitled, "Social Responsibility."

Drs. Houghton and Sakowski participated in a workshop entitled, "Transforming Medicine Clerkship Case-based Curriculum for Web-based Instruction: Lesson Learned." They also participated in an Interest Group discussion entitled, "Web-based Clinical Curriculum."

Dr. Rich also participated in a workshop entitled, "Medicare Financing of Graduate Medical Education (GME): Current Problems, Future Solutions."

Other news

Paul Turner, Ph.D., Assistant Professor of Medicine, participated in an oral presentation, entitled "Outcomes of Care in Teaching Hospitals: The July Phenomenon Revisited," at the HealthCare Cost and Utilization Project Partnership Conference in Washington, D.C. last March. Dr. Bramble and Dr. Rich co-authored this research with Dr. Turner.

Hematology/Oncology

submitted by **Joann Derby, M.D.**

Family history saves lives

Henry T. Lynch, M.D., Professor of Preventive Medicine and Public Health, and of Medicine, a world specialist in hereditary cancer, wants to get the message out on the importance of obtaining a good family history. Advancement in genetics in medicine has made it possible to detect and set up highly targeted surveillance and intervention to save many lives. Fifty-nine percent of deaths from metastatic colorectal cancers could be prevented by simple interventions such as obtaining the family history and identifying those at risk. A good family history need not include extensive pedigrees with Mendelian pathways. It needs to include the patient's siblings, parents and their siblings and grandparents (the patient's children, if applicable). This is a very cost-effective way to screen. Once these families are identified, the entire family can be educated at the same time, saving multiple lives with another cost-effective and time saving intervention, i.e., the family conference.

The cardinal features of a hereditary cancer include: (1) a syndrome with distinguishing phenotypical characteristics, (2) stigmata of a genetic cancer, i.e., early age of onset, and (3) a pattern of (sometimes) multiple cancers. Standards for molecular testing include: (1) a strong family history of cancer, (2) a test that can be adequately interpreted, (3) results will influence management of the patient, (4) along with availability of labs that can do the test.

For example, a genetic syndrome, such as Family Adenomatous Polyposis (FAP), places an identified patient with more than 95% chance of developing colon cancer. Surveillance begins at 10-12 years of age, followed by a prophylactic colectomy when the colonic adenomas are too numerous to manage with polypectomy. These patients are also at risk for extra colonic tumors, including papillary thyroid carcinoma, sarcomas, brain tumors, small bowel cancer, and pancreatic

continued on page 7

Division News

continued from page 5

cancer. Knowledge of the risks of these patients warrants close follow-up and aggressive work-up and management of any abnormality detected. This type of management in these patients extends and improves the quality of their lives.

Genetic information is expanding rapidly and it is essential that physicians incorporate a thorough family history, including the patient's primary and secondary relatives, to indentify those who will benefit from this new technology.

Infectious Diseases/VA Hospital

submitted by **Marvin Bittner, M.D.**

ASSOCIATE PROFESSOR OF MEDICAL MICROBIOLOGY AND IMMUNOLOGY, AND OF MEDICINE

Symposium

Members of the Infectious Diseases Division, especially Administrative Secretary Dona Goodrich, prepared the Division's 21st Annual Infectious Diseases Symposium on April 27, 2001 at the Embassy Suites Hotel in Omaha's Old Market Downtown. Topics included candidal infections, streptococcal infections, catheter-related infections, HIV, and infectious diseases related to smoking and drinking.

Travel Clinic

The Travel Clinic is in the midst of its spring surge as travelers from Omaha and the surrounding area seek immunizations, malaria advice, and advice on travelers' diarrhea before summertime travel. Division faculty staff the clinic, administered by the Douglas County Health Department. It is the only travel clinic in Nebraska listed on the website of the International Society of Travel Medicine. The clinic's chief consultant, Dr. Bittner, has passed the examination of the American Society of Tropical Medicine and Hygiene, and received a certificate for Advanced Knowledge in Tropical Medicine and Travelers' Health.

Other news

Martha Gentry-Nielsen, Ph.D., Associate Professor of Medical Microbiology and Immunology, and of Medicine, is preparing lectures on bio-terrorism preparedness for Nebraska laboratory personnel and emergency medical services personnel, as part of a $7,000 grant from the Nebraska Department of Health and Human Services to Creighton University. Dr. Gentry will deliver lectures to groups in the Lincoln-Omaha area and in a non-metropolitan setting during the spring and summer of 2001.

Gary Gorby, M.D., Associate Professor of Medical Microbiology and of Medicine, and Sarah Lund, Ph.D., Post-Doctoral Fellow, presented posters at the 12th meeting of the International Pathogenic Neisseria Conference in Galveston, Texas. One poster was titled, "Invasion of Human Fallopian Tube Epithelium by *Escherichia Coli*, Expressing *por* and/or *opa* is Inhibited by the 3F11 LOS Epitope." The other poster was entitled, "Relative Invasiveness of Gonococcal *opa* proteins in the Human Fallopian Tube Organ Culture Model."

Dr. Marvin Bittner participated in a preceptorship on HIV resistance testing at Stanford University, including lectures from Stanford School of Medicine faculty members and a visit to the VA Palo Alto Health Care System. The VA is conducting a nationwide training program in HIV resistance testing for VA physicians who provide HIV care. The Palo Alto preceptorship enabled Dr. Bittner to play a key role in training individuals from the VA Integrated Service Network 14, which includes Nebraska, Iowa, and surrounding areas.

Rheumatology

submitted by **Robert Dunlay, M.D.**

ASSISTANT PROFESSOR OF MEDICINE, AND OF PHARMACOLOGY

New COX-2 inhibitor

The Division of Rheumatology, consisting of **John Hurley, M.D.**, Associate Professor of Medicine, and **Jay Kenik, M.D.** Associate Professor of Medicine, is currently involved in a clinical study looking at the efficacy of a new COX-2 inhibitor for patients with rheumatoid arthritis. This is a double-blind study that compares the responses of patients to the new COX-2 inhibitor vs. the responses to a traditional non-steroidal agent.

Professional activity

Dr. Hurley participated in a panel discussion on "Newer Therapies in the Treatment of Patients with Rheumatoid Arthritis." Dr. Hurley spoke on the use of biologic agents including Enbrel and Remicade. These agents work by interfering with cytokines, which are involved in the pathogenesis of early rheumatoid disease. They are now being used in patients who are responding sub-optimally to currently available disease-modifying agents such as methotrexate.

Preventing End-Stage Renal Disease

continued from page 1

with AIIRBs are limited, and these agents may not be as efficacious as the ACE-Is. The goal with either an ACE-I or an AIIRB is to decrease the proteinuria to <1 gram/day. Even if the blood pressure is well controlled, the ACE-I should be increased until no further decrease in protein excretion occurs. Protein excretion may be conveniently followed in most patients using the spot urine protein/creatinine ratio, if both are expressed in milligrams a value <1 usually indicates < gram/day protein excretion. Sodium restriction to 2 grams/day will enhance the antiproteinuric effect of the ACE-Is or AIIRBs.

The decreased quality of life, increased mortality and financial burden of end-stage renal disease cost Americans dearly. Screening for and aggressively treating patients with kidney disorders and hypertension will certainly benefit our society.

Residency Program News

submitted by **Robert Dunlay, M.D.**

As a group, medicine and medicine/pediatrics residents scored in the top half of the country on the annual internal medicine in-training examination.

Department of Medicine Residents also represented our program in a Jeoprady-style competition with 15 teams from other residency programs during the 6th annual American College of Physicians Meeting in Atlanta, Ga. last March. **Drs. Anita Deshpande, Tim Goggins** and **Joseph Tuma** made up the team. They were selected after competition among the Creighton residents.

Results of the American Board of Internal Medicine certifying examination for the year 2000 have Creighton Internal Medicine Residents scoring a pass rate of 88%.

What Can The Cardiac Center Do For Your Patient?

continued from page 5

After further analysis, the cardiologist plans for the patient to start taking an ACE inhibitor on a trial basis to see if Mr. Jones's symptoms improve. A heart catheterization was scheduled to rule out coronary artery disease prior to performing a pacemaker implant.

Heart Catheterization Laboratory

- Encounters 1950 patients per year
- Is directed by **Michael Del Core, M.D.**, Assistant Professor of Medicine, and staffed by five diagnostic/interventional cardiolgists and 13 support personnel
- Performs diagnostic heart catheterization studies via the femoral or radial arteries
- Performs an array of interventional procedures including:
  - o percutaneous transluminal angioplasty;
  - o stent implantation;
  - o rotablator;
  - o angiojet;
  - o cutting balloon;
  - o coronary atherectomy
- Performs endomyocardial biopsies

Mr. Jones' heart catheterization revealed normal coronary arteries, 20% ejection fraction, and stable left and right heart pressures.

Mr. Jones did require a dual chamber pacemaker implant with an uneventful hospital stay. The patient returns to The Cardiac Center Pacemaker/ICD Clinic for a 2-week checkup of the newly implanted device.

Diagnostic Interventional Arrhythmia Services (DIAS)

- Is directed by Dr. Hee and is staffed by three electrophysiologists, five registered nurses and one technician

Pacemaker/ICD Clinic

- Encounters 1670 patients per year
- Interrogates implanted devices to ensure proper functioning and to allow for any necessary "fine tuning"
- Conducts further monitoring over the telephone and at least annual clinic visits
- Performs insertion site wound checks

Electrophysiology Laboratory

- Performs 1200 studies per year
- Performs an array of procedures including:
  - o EP studies;
  - o Ablations;
  - o Cardioversions;
  - o Pacer/ICD exchanges and implants;
  - o Implantable event recorders

Mr. Jones returned to The Cardiac Center for a one-month follow-up. His frequent episodes of atrial fibrillation subsided. He is tolerating the ACE inhibitor, which has improved his SOB and allowed an increase in his activity level. Mr. Jones will continue to receive his primary care from Dr. Smith in rural Iowa.

Cardiology Outreach Clinics

- Are conducted in 16 rural communities in Iowa and Nebraska
- Evaluate 10,000 patients each year
- Offer Noninvasive, Event Recorder and Holter services at most sites

This overview of The Cardiac Center, portrayed by the patient scenario, is just a snapshot of our everyday activities, which enable us to be the regional leader in the prevention and treatment of cardiovascular diseases. Since 1961, The Cardiac Center of Creighton University has brought quality cardiovascular care to the urban and rural communities in Iowa and Nebraska. Working closely with local physicians, Creighton cardiologists and more than 220 skilled cardiac professionals and support staff provide patient convenience in a local setting with a continuum of care—from initial evaluation through the treatment process.

Helen Keller once said, "...the best and the most beautiful things cannot be seen or even touched—*they must be felt with the heart...*" The Cardiac Center helps your patients keep their hearts healthy, to feel the best and most beautiful things in their lives.

THE CARDIAC CENTER of CREIGHTON UNIVERSITY
Quality Patient Care Through Education and Research

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