



VA Research Currents

VA Study: Common colon screening tests miss 25 percent of lesions

In a major VA cooperative study published in the Aug. 23 *New England Journal of Medicine*, one-time screening for colon cancer with sigmoidoscopy and fecal occult-blood testing identified only about 75 percent of the tumors and pre-cancerous lesions detected by full colonoscopy.

The study, conducted on 2,885 patients at 13 VA medical centers, received wide media coverage. In an interview on the Today show, lead investigator David A. Lieberman, MD, chief of Gastroenterology at the Portland VA Medical Center, discussed the ramifications of the study.

“We can now better inform patients when we talk to them about colon cancer,” said Dr. Lieberman. “We can tell them that if they have these tests [sigmoidoscopy and fecal blood test] one time, there is a chance they may not have important lesions detected. With colonoscopy, because we can examine the entire colon, we can ... detect most important pre-cancerous lesions. And we know that we can prevent cancer if we can detect and remove these pre-cancerous growths.”

Dr. Lieberman led a study published in 2000 in which sigmoidoscopy missed a third of the lesions caught by colonoscopy.

Standards finalized for NCOA accreditation

VA released on Aug. 28 the final set of standards for accreditation of VA human-research programs by the National Committee for Quality Assurance (NCQA). The standards will be revised annually to reflect policy changes and enhance protection efforts.

According to William Judy, director of operations for VA research, the standards are “ethics-based, flexible, measurable, based on current federal regulations, and designed around the concept of continuous quality improvement.”

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Update from the Medical Research Service

Upgrading wet-lab infrastructure is goal of new program

By Paul M. Hoffman, MD, *Director, MRS*

VA’s intramural research program is a national resource for biomedical research. The purpose of the Research Evaluation Project, introduced earlier this year and coordinated by the Medical Research Service, is to improve the infrastructure and operations of laboratories within VA’s research program.

VA research is conducted in laboratories at VA medical centers nationwide. These laboratories must meet standards for physical and operational infrastructure to ensure the efficient operation of laboratories and animal facilities, and to maximize the protection of personnel, experimental animals, the public and the environment.

The Office of Research and Development may be able to assist field sites with needed infrastructure improvements by providing funding for shared or common-use equipment,

casework to support renovation projects, or assistance in obtaining VISN financial support for shared equipment or renovation projects. This assistance would be available to research programs meeting certain operational standards.

Surveys to examine the physical and operational infrastructure of research programs will be conducted by the Research Evaluation Project. Evaluation teams with expertise in the physical and operational infrastructure of biomedical programs will conduct surveys of all the major research facilities of the VA. It is anticipated that up to 25 VA research programs will be surveyed each year. The initial facilities to be surveyed were selected based upon requests for funding of medical research equipment, the need for infrastructure improvement or renovation, or

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New Fla. center to study rehabilitation outcomes

VA last month announced the funding of a new rehabilitation-outcomes research center at the North Florida/South Georgia VA Medical Center in Gainesville, Fla. The center is the first within VA to conduct rehabilitation-outcomes research. It is also the first joint-funding effort between VA Health Services Research and VA Rehabilitation Research. As such, according to center director Pamela W. Duncan, PhD, PT, the center will “integrate the skills of both rehabilitation and health services researchers.”

Dr. Duncan is a physical therapist and epidemiologist. Center co-director Stephen E. Nadeau, MD, is a neurologist with expertise in behavioral neuroscience and cerebrovascular disease. They and their VA team will collaborate with colleagues at the University of Florida, Gainesville.

“This is not just a new center but the first center of its kind in VA,” noted John G. Demakis, MD, director of Health Services Research for VA, referring to the center’s mission of studying rehabilitation outcomes.

The center will focus on veterans with central nervous system (CNS) damage resulting from stroke. Long-term goals are to enhance access,

quality and efficiency of rehabilitation services through interdisciplinary research and dissemination. The investigators plan to develop a national database of outcomes for patients with stroke; develop and test outcomes related to newly emerging rehabilitation therapies and technologies; and provide scientific evidence that promotes informed clinical policy.

Recent training for AOs covered many issues

What does VA require of investigators who are publishing their findings? How long can a foreign researcher stay in the United States on a J-1 visa? What are the key regulations of the Animal Welfare Act? How should an internal review board function?

These questions give some indication of the broad, complex range of topics handled by administrative officers (AOs) for research at VA medical centers. AOs from major VA research sites convened Aug. 21 and 22 in San Francisco for a comprehensive training aimed at bolstering their knowledge on key issues.

Joining the AOs were budget clerks and analysts, program managers, IRB coordinators, investigators, Central Office staff, and others involved in conducting and overseeing VA research.

Among the topics of workshops and breakout groups were biosafety and human-subjects protection; VA private research foundations; funding and financial management; personnel issues; animal research; Research Week; dissemination of findings; and the upcoming National Committee for Quality Assurance (NCQA) accreditation process.

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All VA facilities conducting research will be reviewed every three years. So far, nearly 30 centers have been scheduled for the three-day accreditation process, starting with Richmond, Va., and Bedford, Mass., this month.

“I think it’s going to increase the likelihood that the protection of human research subjects is as optimal as possible,” said Barbara White, MD, associate chief of staff for research at the Baltimore VA Medical Center, which ranked second, behind Palo Alto, in VA research dollars last fiscal year.

According to John R. Feussner, MD, MPH, VA’s chief R&D officer, ideally the standards issued for VA will eventually be adopted across the board by all research institutions.

“It is our intention, our hope, to come to one set of criteria, so investigators in the field don’t have one set of rules on the university side and another on the VA side.”

For more information on the accreditation standards for VA research programs, visit <http://www.ncqa.org/Programs/QSG/VAHRPAP/vahrpapfinalstds.doc>. Or, call William Judy at (202) 273-8254. ■

National VA R&D meeting

The annual national meeting for VA R&D will be held Oct. 29 — 31 in Keystone, Colo. All associate chiefs of staff and administrative officers for Research, research coordinators at facilities with active research programs, directors of all R&D-sponsored centers, and directors and administrative officers from Cooperative Studies coordinating centers are strongly encouraged to attend. Details can be found at www.va.gov/resdev/fr/frmtngs/2001annual/announcement.cfm.

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Selected findings

Infection with harmless virus may help HIV patients

A VA team found that a form of hepatitis virus called GBV-C may actually prolong the life of patients with HIV. The harmless GBV-C virus works by keeping the deadly AIDS virus from replicating.

Reporting on his team's study in the Sept. 6 *New England Journal of Medicine*, Jack Stapleton, MD, of the Iowa City VAMC and the University of Iowa, said GBV-C, originally known as the Hepatitis G virus, causes no symptoms itself and therefore may one day pose a new therapy for HIV.

In a study of 362 patients with HIV, Dr. Stapleton and colleagues found a lower death rate among those who also had the GBV-C infection—28.5 percent compared to 56.4 percent. Of 218 HIV patients without the hepatitis virus, 123 died during the 12-year study period. Of 144 patients co-infected with GBV-C, 41 died.

The new study confirmed the results of earlier, smaller studies on the connection between GBV-C and HIV, and added a new twist: The VA team showed that infecting human blood cells in the laboratory with GBV-C slows the rate at which the AIDS virus multiplies.

According to Dr. Stapleton, a virologist and infectious disease specialist, outside of experimental gene therapy there are few if any examples of treating an active disease with a virus. But he said viruses, like bacteria, can at times be beneficial.

"People don't think about the 'friendly neighborhood virus.' Yet undoubtedly this happens," said Dr. Stapleton. "The human genome is full

of retrovirus sequences. The harmful ones have no doubt been largely deleted by natural selection, and the ambivalent or beneficial ones stick around."

Is it a heart attack? New ER protocol gives faster answer

A "critical pathway" developed by a VA cardiologist may provide a quick and reliable way to diagnose heart attack in the emergency room and save money on unnecessary admissions to critical-care hospital units. The new protocol relies on a series of 15-minute blood tests for three cardiac enzymes—troponin I, creatine kinase-MB, and myoglobin—along with electrocardiogram and clinical history.

Reporting his team's findings in the Sept. 15 *American Journal of Cardiology*, Alan S. Maisel, MD, said the 90-minute critical pathway that was tested on 1,285 ER patients with signs of heart attack led to a 40-percent drop in critical-care admissions. Hundreds of patients that would have previously been admitted to the critical care unit were either sent home or to non-critical units. There was about a 20-percent drop in overall hospital admissions.

"We were able to quickly triage patients to appropriate clinical settings or to home, and thus able to avoid excessive and often unnecessary hospital costs," said Dr. Maisel, director of the Coronary Care Unit at the San Diego VA Medical Center, where the study took place, and a professor of medicine at the University of California, San Diego.

Dr. Maisel's method revolves around a newly developed point-of-care blood test that simultaneously checks the levels of three cardiac proteins, or "markers," all of which are elevated in the event of an actual heart attack. In the study, the cardiac-marker test was

100-percent accurate in ruling out heart attack when combined with an electrocardiogram and patient history.

Though all the 1,285 veterans enrolled in the study reported chest pain in the emergency room, 508 patients were sent home within six hours—most of them within 90 minutes—after negative results for their blood test and electrocardiogram. Of these patients, only one returned to the emergency room with an actual heart attack within the next month.

In past research Dr. Maisel tested the effectiveness of a blood test that measures B-type natriuretic peptide (BNP), a cardiac marker that can be helpful in quickly diagnosing congestive heart failure in the emergency room.

High-dose estrogen slows Alzheimer's progression

VA researchers found that higher doses of estrogen may enhance memory and attention for postmenopausal women with Alzheimer's disease (AD). The results, published in the Aug. 28 issue of *Neurology*, challenge earlier clinical trials that found little benefit for short-term estrogen therapy in older women with AD. According to lead author Sanjay Asthana, MD, of the Geriatric Research Education and Clinical Center at the VA Puget Sound Health Care System, the earlier trials may have failed to show a positive effect because the estrogen used was not potent enough.

In the VA study, 20 women with AD received either placebo or estradiol by skin patch for eight weeks. Those receiving the estrogen treatment showed significant gains in attention and in verbal, visual and semantic memory. ■

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requests for investigator off-site waivers.

Each field site will receive a report summarizing the results of the survey and, if appropriate, recommendations for improvements or modifications. The survey results will also be used by VA Headquarters to evaluate requests for equipment support (including Merit Review, replacement, state-of-the-art, animal facility), infrastructure support, and requests for off-site waivers.

A pilot program was completed during the third quarter of fiscal year 2001. Survey teams assessed six facilities: Albuquerque, San Antonio, Iowa City, Martinez (Calif.), Nashville, and Philadelphia. The pilot program was then reviewed to determine the usefulness of the information to the Medical Research Service and Office of Research and Development in making equipment-funding decisions, and to the VA medical center and VISN for improving research operations and infrastructure.

Among the problems noted in some surveys were inadequate and poorly designed research space; heating, ventilation and air conditioning systems in need of immediate repair or replacement; and lack of support for research by hospital ancillary services. Other programs had made major improvements in existing space and clearly had the full support of hospital and VISN officials, affiliates and nonprofit corporations.

The survey process for FY 2002 will allow up to 25 sites to be visited by three teams composed of active research scientists, equipment experts, veterinarians, and research administrators. For more information on the Research Evaluation Project contact William Goldberg, PhD, at (202) 408-3611; or Deanna Robbins, PhD, at (301) 737-4602.

Next R&D Hotline Call:
Nov. 19, 12 – 12:50 p.m. (EST).
Dial (877) 230-4050, code 17323

Funding opportunities

The **Clinical Research Program** of VA's Medical Research Service, announced in July, provides up to \$150,000 for studies of potential new clinical therapies. Letters of intent are due March 1 or Sept. 1, to be followed by submissions of full proposals by the following June 21 or Dec. 21. For details contact LeRoy Frey, PhD, at (202) 408-3630 or leroy.frey@hq.med.va.gov.

Upcoming events

- The 25th anniversary celebration and 2002 annual meeting for HSR&D will be held Feb. 13 – 15 in Washington, D.C. Abstracts are due Oct. 9. For details see www.va.gov/resdev/fr/frmtngs/mtng.cfm
- The 2002 national meeting for Rehabilitation R&D will take place Feb. 11 and 12 in Washington, D.C. Abstracts are due Oct. 1. For details visit www.vard.org.

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