Monitoring Needed for Colorectal Ca Screening

BY JEFF EVANS

BETHESDA, MD. — Colorectal cancer screening initiatives that use evidence-based interventions to target under-screened populations while encouraging use of the full range of screening options should be implemented to improve the use and quality of colorectal cancer screening, according to findings from a panel convened by the National Institutes of Health.

In a draft "state-of-the-science" statement, the 13-member panel also recommended investing in a variety of quality monitoring methods to make sure that colorectal cancer screening is accompanied by high rates of cancer detection and prevention.

Efforts to further increase screening rates in the target population of adults aged 50 or older, which have risen from 20%-30% in 1997 to 55% in 2008, will need to address financial and geographical barriers to screening as well as appropriate follow-up of the results, the panel advised.

"We are convinced by evidence in the literature that efforts … to tailor strategies will be very important to test because in different communities and in different population subgroups there need to be different strategies tested to try and get high [screening] rates," panel chairperson Donald M. Steinwachs, Ph.D., said in a press telebriefing that followed the release of the draft statement.

Systems that remind patients to get screened and one-on-one interactions with providers, educators, or patient navigators could help to increase screening, the panel noted. Systems of care that employ these techniques have much higher screening rates than the national average, such as Kaiser Permanente (75% in the Medicare population) and the Veterans Affairs health care system (80%), according to the statement.

The panel also found that a physician's recommendation is the only consistent physician-related factor that has been shown to predict screening.

"The decision on which approach to use is driven by factors like insurance and patient preferences," said panelist Dr. Leonard E. Egede, professor of medicine in the division of general internal medicine and geriatrics at the Medical University of South Carolina. He noted that when patients have no preference for a particular screening method, most primary care physicians provide fecal occult blood test (FOBT)–based screening (followed by colonoscopy if necessary) or direct access to colonoscopy.

A wide variety of methods with varying screening intervals are available for screening adults aged 50 years and older, including annual FOBT (guaiac or immunochemical), flexible sigmoidoscopy, or double-contrast barium enema every 5 years, and colonoscopy every 10 years. The panel noted that CT colonography is a potentially viable screening option that could be expanded, but it is not currently covered by Medicare.

When colonoscopy overtook FOBT and flexible sigmoidoscopy in 2001 as the most widely used screening method, there was a subsequent decline in the use of flexible sigmoidoscopy. In that same time, double-barium contrast enema fell out of favor and the overall use of occult blood testing declined more gradually, although these stool tests are still widely used in the Veterans Affairs health care system and some managed care systems, according to the statement.

In order to provide colorectal cancer screening to low-income, uninsured, and underinsured populations, the panel noted that the Centers for Disease Control and Prevention recently began the Colorectal Cancer Control Program in 22 states. The program is modeled after the agency's successful breast and cervical cancer screening program, but "its reach so far has been limited," Dr. Egede said.

Most current sources of information on screening rates, such as population-based surveys and administrative data sets, do not provide enough detail on the use and quality of colorectal cancer screening, according to the statement.

"Monitoring systems exists in some communities and in some health care organizations, but overall, we don't have systems that monitor whether or not people are receiving screening services appropriately and whether or not the quality of the services being rendered are the highest," said Dr. Steinwachs, director of the Health Services Research and Development Center at Johns Hopkins University, Baltimore.

The panel suggested that a registry analogous to the existing Breast Cancer Surveillance Consortium should be established to monitor the rates of colorectal cancer screening, overuse, quality, and complications. ■

The statement is available at http://consensus.nih.gov/.

Immunoassay May Identify Early-Stage Pancreatic Cancer

BY KERRI WACHTER

An investigational immunoassay can accurately identify pancreatic cancer, potentially giving clinicians the ability to identify and treat the disease in its early stages, according to research presented at the American Society of Clinical Oncology's annual gastrointestinal cancer symposium.

The assay uses a monoclonal antibody to hone in on malignant pancreatic cells; for added benefit, investigators are also employing the antibody to deliver targeted radiotherapy to tumor cells.

"We were able to identify the overwhelming majority of patients with early-stage disease," lead author David V. Gold, Ph.D., said in a teleconference.

The PAM4 monoclonal antibody (clivatuzumab) quantifies blood levels of the PAM4 protein "that appears to be relatively unique to pancreatic cancer," he said. The protein is not present in normal pancreatic tissue or in other types of malignancies. It also is rarely detected in pancreatitis, making it highly specific for pancreatic cancer.

In the small study, Dr. Gold and his associates evaluated 68 patients who had undergone surgery for pancreatic cancer. The investigators obtained information about disease stage from surgical notes about the spread of the disease. They also evaluated 19 healthy controls.

The sensitivity of the PAM4 blood test for detecting stage I pancreatic cancer (disease confined to the pancreas), stage II disease (disease that has spread to nearby organs), and stage III/IV cancers (disease with local and distant spread) was 62%, 86%, and 91%, respectively. Overall, the assay was 81% sensitive for detecting all stages of pancreatic cancer.

"The PAM4 blood test is very specific for pancreatic cancer. If the assay is positive, there is a high positive diagnostic likelihood that the patient has pancreatic cancer," said Dr. Gold, a researcher at the Garden State Cancer Center in Belleville, N.J.

If validated, the assay would be valuable for the management of patients with the disease. Most patients do not have symptoms until the advanced stages of tumor growth, when cure is unlikely. Currently, only an estimated 5% of patients with pancreatic cancer survive to 5 years, according to the American Cancer Society.

The PAM4 antibody has the potential to be part of an effective therapy as well.

"Detection of the PAM4 antigen in the blood of these patients means that the cancer is producing the protein, and that this protein may act as a marker on the tumor for use of the antibody to target drugs and/or radioisotopes directly to the tumor," Dr. Gold explained.

Researchers have already begun to explore attaching radioisotopes to the antibody in order to image tumors, or to target radiotherapy of the tumor cells in combination with chemotherapy. In a small related study, the researchers achieved a partial response rate (defined as at least a 30% reduction in the size of the tumor) of 23% and a stable disease rate of 45% in patients with stage III and IV pancreatic cancer.

"By using the combination of early detection and therapy improvements, we hope to be able to come up with a new paradigm for the management of the patient with pancreatic cancer," Dr. Gold said.

The assay still needs to be validated in larger trials, however. He estimated that the assay and related therapies are still 2-3 years from clinical use. ■

Disclosures: *Dr. Gold did not provide a disclosure statement. The study's senior author, Dr. David M. Goldenberg, disclosed that he is the chief scientific officer and chairman of the board of directors for Immunomedics Inc., a biopharmaceutical company that develops monoclonal, antibody-based products for the targeted treatment of cancer and other diseases.*

MY TAKE

Earlier Diagnosis Will Save Lives

Early diagnosis of pancreatic cancer can lead to a 10-fold improvement of survival (approximately 20% 5-year surgical survival for stage I disease versus 2% for stage IV disease). The problem has always been how to identify the patient with early disease since symptoms may occur late in those with pancreatic cancer.

The recent discovery that circulating blood levels of PAM4 (quantified through use of the monoclonal antibody clivatuzumab) are "relatively unique to pancreatic cancer" and positive in 68% of those with stage I pancreatic cancer raises hopes that we now have a tool that can lead to earlier diagnosis.

We do need to know more about the protein and its false-positive rates, ensuring that it is not prevalent in non-cancer patients with chronic pancreatitis, diabetes mellitus, cigarette smoking, and other conditions that predispose to pancreatic cancer. That information and the development of a logical clinical algorithm of how to utilize circulating levels of PAM4 as a screening test will be important to determining its future clinical use.

ROWEN K. ZETTERMAN, M.D., *a gastroenterologist, is dean of the school of medicine at Creighton University, Omaha, Neb. He reported no conflicts of interest.*