DNA STOOL TEST HAS POTENTIAL TO MAKE COLORECTAL SCREENING A BREEZE

The key to painless, noninvasive, early diagnosis of colorectal cancers and adenomas could be as simple as examining stool samples for DNA alterations, according to a recent report in the journal *Gastroenterology* (2000;119: 1219-1227).

Altered DNA arises from neoplasms and is shed into the lumen continuously through exfoliation rather than occasionally through blood. Thus, David Ahlquist MD, and his colleagues at the Mayo Clinic surmised that testing stool for DNA might be more reliable than the fecal occult blood test, which misses many cancers and adenomas.

The researchers ran a fecal DNA assay panel on frozen stool samples from 22 patients with known colorectal cancer, 11 patients with colorectal adenomas, and 28 non-cancerous controls. They found mutations and/or other DNA changes in the stool samples from 90% of cancer patients, and in 73% of those from adenoma patients. None of the control samples were found to have altered DNA.

Ahlquist noted that some of the patients in this small study had advanced cancers, which may have had increased shedding. He writes that these encouraging data clearly call for larger clinical trials, to see “if these pilot observations hold up, and the testing can be simplified. Then the long-held goal of a noninvasive, sensitive, and specific fecal screening tool may be within reach.”

Robert Smith, PhD, director of cancer screening for the American Cancer Society, says the potential for the DNA stool test to evolve into a new, more efficient screening test for colorectal cancer seems very promising. “However, the results are years away, and while more efficient screening tests are in development, the public needs to be reminded that the tests currently available are quite good at detecting colorectal cancer early, when treatment has the greatest probability of being successful,” he says. “All adults age 50 and older, and younger individuals at higher risk, should talk with their health care providers about beginning regular screening” (see article on page 38 for more about colorectal screening).

ANTISENSE DRUG ENHANCES RESPONSE IN CHEMoresistant MELANOMAS

The antisense drug augmerosen improved the effectiveness of chemotherapy and helped shrink tumors in patients with metastatic melanoma, according to a preliminary report in *The Lancet* (2000;356:1728-1733).

In phase I-II clinical trials, Burkhard Jansen, MD et al of the University of Vienna, treated 14 stage-IV patients with augmerosen—which in earlier animal studies had successfully inhibited production of BCL2 protein—thus sensitizing chemoresistant tumors to chemotherapy. BCL2 prevents apoptosis and is found in high levels in most melanoma cells.

Jansen gave augmerosen, either by subcutaneous injection or intravenously, to all patients in combination with dacarbazine. Most patients had previously failed to respond to the chemotherapy alone.

Six of the 14 patients experienced antitumor activity: One complete response, two partial responses in which tumors shrank to less than...
WOMEN, DOCTORS URGED TO HEED EARLY SIGNS OF OVARIAN CANCER

Women with ovarian cancer would be diagnosed sooner and have a better prognosis if both they and their physicians were more familiar with its symptoms and if appropriate tests were done earlier.

A study, published in Cancer (2000;89:2068-2075) found that most women diagnosed with ovarian cancer did, in fact, have symptoms prior to diagnosis but were unaware the symptoms could be signs of cancer. Physicians often initially attributed the symptoms to irritable bowel syndrome, stress, gastritis, depression, or constipation, or were unable to discover a cause for the symptoms. Barbara A. Goff, MD, assistant professor of obstetrics and gynecology at the University of Washington in Seattle, and her team examined the results of surveys completed by 1,725 women with ovarian cancer in 46 states and four Canadian provinces.

Almost 90% of the women in the study who were diagnosed with ovarian cancer at an early stage reported having one or more symptoms, such as abdominal pain, bloating, pelvic pain, or back pain. For just 55% of all the women surveyed, the correct diagnosis was made within two months after symptoms appeared. It took three to six months for a diagnosis in 19% of the women, and more than a year for 11%. The more delayed the diagnosis, the more advanced the cancer was when it was identified.

The authors conclude that providers should perform pelvic exams on women with abdominal, pelvic, and constitutional symptoms. In addition, the ACS recommends that a pelvic exam should be part of an annual cancer-related check-up for women 40 years of age and older. Women 20 to 39 years of age should have a cancer-related check-up every three years.