Women Require Less Tobacco Exposure Than Men to Increase Colon Cancer Risk

Another Study Finds Smoking Heightens Risk of Pancreatic Cancer Precursor Lesion Risk

Orlando, FL October 6, 2008 — While smoking poses a health threat to both men and women, women require less tobacco exposure than men to have a significant increased risk for colorectal cancer, according to new research presented at the 73rd Annual ACG Scientific Meeting in Orlando. In a separate analysis, researchers found smoking may increase the risk of pancreatic cancer precursor lesions, particularly in patients with a strong family history of the disease.

While research has demonstrated that smoking is associated with a two-fold risk for colorectal neoplasia, less is known about the exposure quantity needed. Joseph C. Anderson, M.D., of the University of Connecticut in Farmington and Zvi A. Alpern, M.D. of Stony Brook University in New York compared the quantity of tobacco exposure to increased colorectal cancer risk in men and women. The levels of tobacco exposure were measured by multiplying the packs of cigarettes smoked per day by the number of years smoked ("pack years.")

In a large cross-sectional study, Drs. Anderson and Alpern analyzed data of 2,707 patients (average age 57.3) who underwent colonoscopy between 1999 and 2006. Data collected included age, height, weight, family history of colon cancer, medication use, surgery, exercise, diet and smoking history.

Patients were divided into three smoking groups: heavy exposure, low exposure, and no exposure. The heavy exposure group was placed into two different groups: those who smoked 30 pack years or less and those who smoked more than 30 pack years.

Women’s Risk Higher for CRC with Fewer “Pack Years”

After adjusting for potentially confounding factors such as age, body mass index, and family history, researchers found women who smoked less than 30 pack years were almost twice as likely to develop significant colorectal neoplasia compared to women who were not exposed to cigarette smoke.

“While men and women shared a similar two-fold risk for developing significant colorectal neoplasia, women required less tobacco exposure in pack years than men to have an increase in colorectal cancer risk,” said Dr. Anderson.

Cigarette Smoking May Increase Risk of Pancreatic Cancer Precursor Lesions in At-Risk Patients

In a separate study conducted at Memorial Sloan-Kettering Cancer Center in New York, Dr. Emmy Ludwig and her colleagues examined tobacco exposure and the risk of pancreatic cancer...
precursor lesions in patients enrolled in a familial pancreatic cancer registry and screening program.

In this analysis, at-risk relatives of familial pancreatic cancer patients were screened using MRCP (magnetic resonance cholangiopancreatography) or CT scan with an endoscopic ultrasound performed if imaging showed any pancreatic abnormality. Patients underwent surgery if suspicious lesions were found.

Of the 113 relatives who completed at least one screening study, 8.9 percent had a significant pancreatic lesion, 6 of whom underwent surgery. In a key finding, researchers found 70 percent of relatives with pancreatic abnormalities had a history of smoking compared to 40 percent of participants who did not smoke.

According to lead investigator Dr. Ludwig, “Because more of the relatives with positive findings smoked than did relatives without positive findings, our study suggests that smoking may have been responsible for the development of the precursor lesions, especially in light of the fact that smoking is a known risk factor for pancreatic carcinoma.”

About the American College of Gastroenterology
Founded in 1932, the American College of Gastroenterology (ACG) is an organization with an international membership of more than 10,000 individuals from 80 countries. The College is committed to serving the clinically oriented digestive disease specialist through its emphasis on scholarly practice, teaching and research. The mission of the College is to serve the evolving needs of physicians in the delivery of high quality, scientifically sound, humanistic, ethical, and cost-effective health care to gastroenterology patients.

The ACG is committed to providing accurate, unbiased and up-to-date health information. Visit the ACG Web site www.acg.gi.org to access educational resources for patients and their families spanning the broad range of digestive diseases and conditions - both common and not-so-common. Organized by disease, state and organ system, these educational materials, developed by ACG physician experts, are offered for the information and benefit of patients and the public.

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