Medical Xpress

Colonoscopy screening reduces risk of advanced colorectal cancer, study finds

March 4 2013

A new study led by the Perelman School of Medicine at the University of Pennsylvania adds support to current medical recommendations stating that screening colonoscopy substantially reduces an average-risk adult's likelihood of being diagnosed with advanced colorectal cancer (CRC) in either the right or left side of the colon. In recent years, colonoscopy has begun to rapidly replace sigmoidoscopy – a procedure used to detect abnormalities in the rectum and left side of the colon – despite initially limited evidence of its efficacy and higher cost. In the new study, researchers noted an overall 70 percent reduction of advanced CRC diagnoses associated with receiving a screening colonoscopy. The results of the study suggest that colonoscopy has the ability to effectively identify tumors in both the left and right side of the colon before they progress to an advanced stage. The full results of the study appear online in the *Annals of Internal Medicine*.

Previous research has established that screening with sigmoidoscopy or fecal occult blood test reduces the risk of death from colorectal cancer. By contrast, the efficacy of the colonoscopy – which examines the entire colon for precancerous and cancerous growths – in average-risk adults has remained largely uncertain. Colonoscopy's effectiveness in the right colon (where approximately 50 percent of new CRC cases in the U.S. are found) has remained in doubt.

"Colorectal cancer is one of the most important cancers we face in this country. It was responsible for over 50,000 deaths in 2012, and the truth is, most of those deaths are preventable through screening, early

detection, and treatment," said Chyke Doubeni, MD, MPH, presidential associate professor of Family Medicine and Community Health at Penn Medicine, and lead author on the study. "Our goal with this study was to understand the extent to which colonoscopy can prevent the diagnosis of advanced colorectal cancers, the ones that primarily result in death. What we saw was a dramatically reduced risk of death for patients who were screened."

Although the incidence of CRC and cancer-related deaths is decreasing, CRC remains the third most common cancer worldwide and the second leading cause of cancer deaths. Experts say that given what is known about the efficacy of screening colonoscopy, the procedure is underutilized.

"Screening colonoscopy is used to look for early growths which may turn into cancer by allowing physicians to see any polyps or bleeding in the colon or rectum," explains Michael Kochman, MD, Wilmott Family Professor of Medicine and co-director of the Gastrointestinal Oncology Program at Penn Medicine. "If any abnormalities – such as polyps – are detected, the physician can remove all or part of them with biopsy techniques during the procedure, making it a very effective means of spotting and removing potentially cancerous growths."

In order to determine the efficacy of colonoscopy in preventing advanced colorectal cancer diagnoses, the researchers developed a case-control study in which data from four U.S. managed care organizations that participate in the HMO Cancer Research Network were evaluated. Medical records for 1,012 average-risk patients between 55-85 years old were analyzed for the report. Among the 474 patients in the study who had advanced colorectal cancer, 251 of them (roughly 54 percent) had tumors in the right side of the colon – where sigmoidoscopy would not have been an effective screening modality. Randomized trials are currently underway to help researchers learn more about the

effectiveness of colonoscopy, but those results will not be available for several years.

"The results of this study confirm the effectiveness of screening colonoscopy and reinforce the importance of the procedure for all adults over the age of 50," said Robert H. Fletcher, MD, MSc, professor emeritus at Harvard Medical School and co-author on the study. "As we wait to learn more about the effectiveness of screening colonoscopy through clinical trials, this case-control study provides credible answers that support current screening practices and recommendations."

Provided by University of Pennsylvania School of Medicine

Citation: Colonoscopy screening reduces risk of advanced colorectal cancer, study finds (2013, March 4) retrieved 8 May 2024 from https://medicalxpress.com/news/2013-03-colonoscopy-screening-advanced-colorectal-cancer.html