Simple, at-home test will detect most colorectal cancers

3 February 2014

Tests that require patients to collect a single stool sample at home and then send it to a lab for analysis will detect about 79 percent of colorectal cancers, according to a new evidence review published in the *Annals of Internal Medicine*. The review of 19 studies examining eight different fecal immunochemical tests, know as "FITs", also finds that the tests will correctly identify about 94 percent of patients who do not have cancers of the rectum or colon.

"We know the FIT is easy to use, and now we also know that it is a great tool for assessing which patients have cancer and which patients don't," said Beth Liles, MD, review co-author and clinical investigator at the Kaiser Permanente Center for Health Research in Portland, Ore.

Colorectal cancer is the second leading cause of cancer death in the United States, according to the Centers for Disease Control and Prevention. Yet one in three adults is not adequately screened.

"FIT is simple, can be done at home, and can save lives," said Jeffrey Lee, MD, MAS, the study's lead author and post-doctoral researcher at the Kaiser Permanente Division of Research in Oakland, Calif. and University of California, San Francisco. "The American Cancer Society and other professional organizations have recommended FIT as a screening tool for colorectal cancer since 2008, but there are still many people who don't know about it."

The U.S. Preventive Services Task Force recommends that people with normal risk for colorectal cancer should begin screening at age 50 and end at age 75. Unlike older stool tests, FIT does not require people to restrict their diets or to stop taking medications. Conducted annually, the test detects small amounts of blood in the stool, and people who test positive are much more likely to have colorectal cancer. People who have a positive FIT need a follow-up colonoscopy to look for cancer or pre-cancerous polyps.

Other screening options for colorectal cancer include sigmoidoscopy, which involves physical examination of the lower colon, recommended every five years; or colonoscopy, which examines the entire colon, every 10 years.

Review Details:

The evidence review, funded by the National Institutes of Health, found that the FITs were fairly sensitive. On average, the tests detected 79 percent, or about 4 of 5 cancers with only one round of testing. The tests were also highly specific: on average, 94 percent of people who did not have cancer tested negative with a single FIT.

By comparison, studies indicate that another at-home test called fecal occult blood test (also known as FOBT) detects only about 13 to 50 percent of cancers after a single round of testing. The FOBT is the predecessor to FIT and requires three stool samples as well as medication and dietary restrictions.

According to the evidence review, no single FIT performed markedly better than another, but the authors caution that there was only one study comparing brands head-to-head. Most of the FITs required collection of only one stool sample. Surprisingly, the authors found that brands requiring two or three stool samples were no more accurate than those requiring only one sample.

The 19 studies reviewed included between 80 and 27,860 patients, with the average age ranging from 45 to 63. Study settings varied, but all included patients with no symptoms of colorectal cancer. In 12 of the studies, all patients took the FIT and received a colonoscopy. In seven studies, patients only had a colonoscopy to follow-up on a positive FIT. Approximately two years later, researchers followed up with patients who had had a negative

FIT to determine whether they had been diagnosed with colorectal cancer.

This research is part of Kaiser Permanente's ongoing efforts to promote prevention and evidence-based care. Last year Kaiser Permanente researchers found that patients who visited their doctor for any reason were nearly six times more likely to get screened for colon cancer compared to those who didn't visit their doctor.

Provided by Kaiser Permanente

APA citation: Simple, at-home test will detect most colorectal cancers (2014, February 3) retrieved 6 May 2021 from https://medicalxpress.com/news/2014-02-simple-at-home-colorectal-cancers.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.