

Study finds flexible sigmoidoscopy screening reduces colorectal cancer incidence and mortality

By ACSH Staff — August 13, 2014



Colorectal cancer (CRC), or colon cancer, is the third most

common cancer worldwide, and the second leading cause of cancer death. According to the Colon Cancer Alliance, the exact causes of colon cancer are unknown, but the chance of developing the disease increases in people over 50 and in those who have a family history of colon cancer, as well as those with inflammatory bowel disease and those with a rare familial mutation. The disease usually develops from polyps called adenomas. However, if detected early, adenomas can be removed by colonoscopy or flexible sigmoidoscopy before they become malignant.

Dr. Åvind Holme, MD, and colleagues [set out to estimate](#) ^[1] the effectiveness of flexible sigmoidoscopy screening on colon cancer incidence and mortality in a population-based sample. The screening was performed in the years 1999-2000 on participants between the ages of 55-64, and again in the year 2001 on participants between the ages 50-54.

In the study, about 100,000 participants living in Oslo and Telemark County, Norway, were randomized to receive once-only flexible sigmoidoscopy or a combination of once-only flexible sigmoidoscopy and fecal occult blood testing (FOBT). Each of the screening groups had 10,283 participants, while the control group receiving no screening had 78,220 participants. Adherence with screening was 63%. Participants with positive screening results (including cancer, adenomas, polyps larger than 10 mm, or positive FOBT) were offered colonoscopy; a total of 2816 colonoscopies were performed.

After an average of 11 years, 71 participants in the screening group and 330 in the control group died of colon cancer. Colon cancer was diagnosed in 253 participants in the screening group, and 1086 participants in the control group. Flexible sigmoidoscopy screening was therefore estimated to reduce colon cancer incidence by 20% and colon cancer mortality by 27%. There was no difference in the reduction of colon cancer incidence between the 50-54 year age groups and the 55-64 year age groups. There was also no difference in the flexible sigmoidoscopy only and the

flexible sigmoidoscopy and FOBT groups.

While the results of this study are in accordance with previous studies on the reduced incidence and mortality of colon cancer due to flexible sigmoidoscopy, this is the first study to examine the effects on participants under 55 years old. Also, because participants were found using random sampling directly from the population registry, it allows a reflection in effectiveness of a national screening program with similar adherence.

ACSH Dr. Gil Ross added this comment: While colonoscopy remains certainly the gold standard for early detection, and often treatment, of pre-malignant and early-malignant colo-rectal growths, many folks are reluctant to undergo the procedure. Flex-sig is much less intrusive and if we in public health can get more Americans who refuse to get colonoscopic screening in for a flex-sig, more lives can be saved.

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Links

[1]

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