Cystic Fibrosis Research News

Title:
Increased Prevalence of Colonic Adenomas in Patients with Cystic Fibrosis

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What was your research question?
Colon cancer risk is elevated in patients with cystic fibrosis (CF). The purpose of this study was to determine whether pre-cancerous polyps (adenomas) would be detected more frequently in colonoscopies done on people with CF compared to patients that did not have CF.

Why is this important?
Colonic adenomas are lesions that develop into colon cancer. If detected and removed early through colonoscopy, the risk for developing colon cancer is greatly reduced. It is important to determine whether general screening colonoscopy guidelines can be applied to people with CF if they have a greater risk and how much greater the risk is.

What did you do?
People with CF were asked to have a colonoscopy which is a procedure that allows visualization of the colon and the potential removal of any polyps (abnormal growths) found during the procedure. Removed polyps were then characterized to determine whether they were adenomas, which could potentially develop into colon cancer. The percentage of people with CF that had adenomas was then compared to the percentage for patients that do not have CF but were of the same sex and similar age.
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What did you find?
Of the 30 people with CF that had undergone a colonoscopy, 13 or approximately 43% had adenomas compared to 7 of 150 or approximately 5% for the control group (patients that do not have CF). This means that people with CF are over 9 times more likely to have adenomas in their colons than patients of the same sex and age. Furthermore, the mean age of the people with CF and adenomas was quite young at 45.

What does this mean and reasons for caution?
The results indicate that people with CF are at a much greater risk for having adenomas in their colons. These adenomas, if not detected and removed during a colonoscopy, could lead to colon cancer. Furthermore, colon cancer screening guidelines for the general population suggest having a colonoscopy starting at age 50 but our study indicates adenomas can be found in people with CF much earlier. Thus, it is important for patients and healthcare workers to be made aware about this risk and follow recently published colonoscopy guidelines made specifically for individuals with CF.

What’s next?
Future work will look to expand the current study to include more patients, further clarifying the best age to initiate screening colonoscopies in individuals with CF as well as determining the effectiveness of newly published guidelines.

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