

Colorectal Cancer – Why You Should Get Screened
IFFGD Newsletter
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In honor of colorectal cancer awareness month, we are taking some time to recognize the importance of colorectal cancer (CRC) prevention and the barriers that contribute to a reduced patient adherence to routine screening. Screening can detect pre-cancerous polyps before they transform into cancer and enable millions of Americans to stay healthy. Routine screening is recommended by The American Cancer Society for healthy people aged 45 years and older (1).

About Colorectal Cancer (CRC)

CRC is the third most common cancer diagnosed in both men and women and the second-leading cause of cancer-related deaths. The American Cancer Society estimates that 104,000 new cases of colon cancer will occur in the United States in 2020 (2). Overall, the lifetime risk of developing colorectal cancer is about 1 in 22 (~4.5%) for men and 1 in 24 (~4.2%) for women (2).

CRC most typically starts as a growth, also known as a polyp, on the inner lining of the colon or the rectum and it takes approximately 10-15 years for a small polyp to develop into cancer (3). There are a number of factors that influence the likelihood of a polyp to become cancerous overtime, including polyp type, size, quantity and presence of dysplasia (3). Polyps smaller than 10mm are usually non-cancerous but the rate of malignancy increases from there, reaching almost up to 40% for polyps >30 mm (4). If more than two polyps are found, the risk of one of the polyps being cancerous also increases (3). Lastly, the presence of dysplasia or abnormal cells in the colon or rectum may indicate a stage preceding the development of cancer.

Once a pre-cancerous polyp develops in the colon or the rectum, it can grow into the inner lining or walls, starting in the mucosa, the innermost layer of the wall. During this stage of development, cancer cells can grow into blood vessels or lymph vessels and travel to other lymph nodes and parts of the body. Depending on how deeply the cancer grows into the wall determines the stage of cancer and extent of spread. This is why detecting polyps before they turn into cancer or at early stages is crucial, because this can either prevent CRC development or improve prognosis. 5- year survival rates for localized stages of CRC are high, around 90%, but decrease as low as 14% for stages in which CRC has reached distant locations (5).

Lifestyle factors including diet, weight, smoking and lack of physical activity have been linked to increased risks of CRC. Other factors include old age, race, ethnicity, personal history of CRC, presence of colorectal polyps and inflammatory bowel disease, family history of CRC, etc (6). Patients should discuss with their doctors these risk factors and come up with a screening plan that meets their needs.

CRC Screening

Screening enables both the detection of pre-cancerous polyps and detection of colorectal cancer early, when it has not yet spread and is easier to treat. Pre-cancerous polyps can take 10 to 15 years to become cancerous and as such, there is a large window of opportunity for doctors to find and remove polyps before they can develop into cancer (7). When CRC is detected at early stages, the 5-year relative survival rate is about 90%, but only 4 out of 10 CRCs are found at this stage (5). In 2015, only 62.6% of adults underwent CRC screening (8). There is a great need to increase awareness of this devastating but highly preventable disease to enhance screening rates and reduce CRC related deaths.

There are number of recommended screening tests currently available, with different pros and cons for patients, including their ability to detect pre-cancerous polyps and the amount of preparation required for the test. Colonoscopy is the gold standard for colorectal cancer screening, given that it can detect both pre-cancerous and cancerous polyps and remove polyps during the test. Yet, adherence rates remain low, in part due to barriers associated with the colonoscopy procedure, including required laxatives preparation, invasiveness, possible pain, embarrassment and risks of cross-contamination. There are several patient-friendly screening methodologies available, including stool-based test such as fecal immunochemical test (FIT), guaiac-based fecal occult blood test (gFOBT), and the stool DNA test. These non-invasive screening options might be good at detecting cancer. However, they have low sensitivity at detecting precancerous polyps thus, missing the crucial detection window for the prevention of colorectal cancer. Patients should discuss with their doctors their needs and options ahead of time. Visit the [American Cancer Society](https://www.cancer.org/cancer/colon-rectal-cancer/detection-diagnosis-staging/acs-recommendations.html) to learn more about screening tests available.

It is crucial to globally increase CRC screening rates and the ability to detect pre-cancerous polyps. Fortunately, there are number of innovative companies developing patient-friendly screening options with enhanced pre-cancerous sensitivities comparing to the current methods. We look forward to seeing those in the market soon and in the meantime, let's together increase awareness about CRC and the importance of screening for the prevention of this devastating but highly preventive disease.

References:

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