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Perspective

Brief Note on Colorectal Cancer

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DESCRIPTION

The American Cancer Society (ACS) updated its colorectal cancer screening guidelines in 2012. The guidelines serve as a reference for suggested testing and timetables depending on colorectal cancer risk factors. The ability of screening tests to detect the presence of cancer or identify a patient with polyps that may become cancerous is classified. Some exams, like colonoscopy, necessitate bowel preparation in order to cleanse the viewed region and facilitate evaluation. This can be accomplished with a variety of products. When a patient is diagnosed with colorectal cancer, they may receive therapy that includes surgery, radiation, and/or systemic therapies. Colorectal cancer is preventable, and following screening protocols can help people live longer lives. Pharmacists' awareness with these guidelines and knowledge of screening tests can be a great resource for patients and can encourage them to follow ACS recommendations.

For decades, practitioners and patients have had access to cancer screening guidelines in order to increase awareness of cancer signs and promote timely diagnosis and treatment. The American Cancer Society (ACS) modified its colorectal cancer early detection guidelines in June 2012. This page will include background information on colorectal cancer pathology and therapy, as well as a summary of the new colorectal cancer screening guidelines.

According to the American Cancer Society, more than 103,000 Americans will be diagnosed with colorectal cancer in 2012, with approximately 52,000 deaths. Colorectal cancer is the third most frequent cancer in the United States, as well as the third highest cause of cancer death. Age over 50, hereditary intestinal polyposis and no polyposis conditions, personal or family history of colorectal cancer, history of inflammatory bowel disease (i.e., ulcerative colitis or Crohn's disease), history of Streptococcus bovis bacteremia, use of ureterosigmoidostomy, and presence of type 2 diabetes are all risk factors for colorectal cancer. A high-fat diet, tobacco use, physical inactivity, obesity, and heavy alcohol consumption are all lifestyle factors that may contribute to the development of colorectal cancer. Colorectal cancer has been linked to night-shift work for three or more days per week for at least 15 years.

When many cumulative genetic mutations change cell processes that typically regulate division, migration, and differentiation, colorectal cancer develops in epithelial cells of the colon or rectum, conferring malignant proliferative, invasive, and metastatic properties on the cells. Once a tumour has become malignant, continuing genetic instability causes further changes that can modify the cancer's characteristics over time and treatment sensitivity. Some of these alterations, such as activation of the latent gene expressing carcinoembryonic antigen, can be tested in the blood to monitor therapy response or detect recurrence, and can serve as tumour markers for physicians.

Polyps, which extend from the mucosal surface into the gastrointestinal (GI) tract lumen, are the most common cause of colorectal cancer. Hamartoma (junior polyp), hyperplastic mucosal proliferation (hyperplastic polyp), and adenomatous polyp are the three types of polyps that can be found. The only premalignant type is adenomatous, and only about 1% of these polyps become cancerous Adenomatous polyps are found in about 30% of middle-aged patients and 50% of elderly patients, highlighting the importance of early detection to identify those who are affected before the polyp becomes cancerous.

Histologic traits, size, and appearance are all factors that influence the likelihood of a polyp turning malignant. Tubular, villous, or tubulovillous adenomas are the most likely to be malignant, followed by villous adenomas. Sessile (flat) or pedunculated (stalked) adenomatous polyps exist, with sessile polyps being more likely to proceed to malignancy. Finally, polyps larger than 2.5 cm are five times more likely than those smaller than 1.5 cm to be malignant (10 percent vs. 2 percent). Overall, it takes at least 5 years for an adenomatous polyp to grow to clinical significance, implying the importance of initiating screening and performing routine follow-up evaluation to identify polyps of concern before they become cancerous. As the developing polyp grows, it may extend into the muscular wall of the colon, where it can invade nearby blood and lymph vessels and thereby enable local or distant metastasis.

Types of colorectal cancer

- Adenocarcinoma
- Gastrointestinal Stromal Tumors (GIST)
- Lymphoma
- Carcinoids
- Turcot Syndrome
- Peutz-Jeghers Syndrome (PJS)
- Familial Colorectal Cancer (FCC)
- Juvenile Polyposis Coli

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