



CLINICAL ALERT: Early Age Onset Colorectal Cancer™










ATTENTION HEALTH CARE PROVIDERS

Adult & Pediatric Primary Care, Family & Internal Medicine, Gastroenterology, OB-GYN, Surgical Specialties, Emergency & Urgent Care Departments, Occupational Medicine, Community Health Centers, Departments of Health, and health care systems world-wide.

You can help save young adult lives from colorectal cancer.

- ☆ The rate of colorectal cancer (CRC) in adults under the age of 55 has been on the rise since the mid-1980s in the U.S.
- ☆ Adults born in the **1990s** (now in the their 20s) have **double** the lifetime risk of **colon** cancer, and **quadruple** the risk of **rectal** cancer, compared to adults born in 1950s.
- ☆ Approximately 20% of all colorectal cancer patients diagnosed in the U.S. are under 55 years of age.
- ☆ **CRC symptoms need to be evaluated. Patients complaining of symptoms that would trigger a colonoscopy in an older adult should warrant the same consideration in younger patients.**
- ☆ Collect cancer family history; colorectal cancer screenings should be recommended for patients with a family history of colorectal cancer or polyps (screening should begin 10 years prior to a first degree relative being diagnosed or polyps found).

COLORECTAL CANCER SIGNS & SYMPTOMS

-  Blood in your stool
-  Change in Bathroom Habits
-  Fatigue
-  Anemia
-  Unexplained Weight Loss
-  Persistent Cramps or Low Back Pain
-  Feeling Bloating

PATIENTS PRESENTING WITH SYMPTOMS SHOULD TO BE REFERRED FOR DIAGNOSTIC EVALUATION.

THE IMPORTANCE OF FAMILY HISTORY

- ☆ A first-degree relative with colorectal cancer increases the risk of colorectal cancer 2-3 times.
- ☆ Approximately 15% of young adult colorectal cancers are associated with known hereditary syndromes.
- ☆ A patient with a first degree relative diagnosed with advanced colorectal polyps (adenomas) has a significantly increased risk of being diagnosed with colorectal cancer or large adenomas

FAMILY HISTORY OF COLORECTAL CANCERS AND POLYPS SHOULD BE INCLUDED IN A PATIENTS EMR.

AN ALARMING INCREASE: A Young Adult Cancer Control Emergency

The rate of colorectal cancer (CRC) in young adults under the age of 55 has been on the rise since the mid-1980s in the U.S.⁽¹⁾ Adults born in the 1990s (now in their 20s) and beyond have double the lifetime risk of colon cancer, and quadruple the risk of rectal cancer, compared to adults born in 1950s.^(1,2) Currently, approximately 20% of all CRCs diagnosed in the U.S. are among those under 55 years of age.⁽¹⁾

Unfortunately, patients diagnosed with CRC prior to age 55 are 58% more likely than older patients to be diagnosed with more advanced disease (stage III or IV) due to a delay in diagnostic evaluation of symptoms and less access to medical care.⁽¹⁾ Delays in diagnosis, late stage presentation, and limited access to care all contribute to increased mortality for young adult CRC patients.⁽³⁾ Both the increasing incidence and mortality of young adult colorectal cancer are in sharp contrast to the overall declines in incidence & mortality observed in people over age 55.^(1,3)

SIGNS & SYMPTOMS

Up to 70% of young onset colorectal cancer (CRC) cases present with no known risk factors. The majority of cases are “sporadic” and not associated with the known hereditary CRC syndromes. Risk assessment, however, remains critically important, please see opposite column.

Due to the frequent lack of identifiable risk factors, earliest possible recognition of symptoms and signs is critical to saving lives. Symptoms & Signs include:

- rectal bleeding,
- change in bowel habit,
- diarrhea,
- abdominal pain,
- low mean red cell volume,
- raised platelets,
- abnormal liver function,
- low hemoglobin, and
- raised inflammatory markers.⁽⁴⁾

PATIENTS WITH SYMPTOMS SHOULD BE REFERRED FOR DIAGNOSTIC EVALUATION. INCLUDING COLONOSCOPY.

IMPORTANCE OF FAMILY HISTORY

Family and Personal History of colorectal cancer and adenomas (especially advanced adenomas > 1cm) is critical in helping to identify who is at increased risk of CRC and eligible for earlier age and more frequent colorectal screening.⁽⁵⁾ This is a fundamental component of primary health care and requires time, functional, supportive electronic medical record systems as well as health care organizations that value & prioritize securing and acting on this life saving information.

Individuals at significant increased risk include:

- Individuals with a positive first-degree relative history of colorectal cancer have a 2-3 times increased risk of developing CRC.^(6,7)
- Approximately 15% of young adult colorectal cancers (diagnosed prior to age 50) are associated with the known hereditary colorectal cancer syndromes including Lynch syndrome, Familial Adenomatous Polyposis (FAP), MUTYH-associated polyposis (MAP) and other germline variants *potentially* associated with increased CRC risk.⁽⁸⁾
- First degree relatives of patients with advanced colorectal polyps (adenomas) have a significantly increased risk (Odds Ratio of 2.27) of being diagnosed with “cancers or large adenomas”.⁽⁹⁾

ACTION STEPS CAN BE TAKEN TO REDUCE YOUNG ADULT CRC INCIDENCE AND MORTALITY

1. **Education of the public as well health care providers at the earliest stages in the continuum of medical education about the rising probability of colorectal cancer in people younger than age 55-years and the importance of knowing and acting on a family history of the disease.**
2. **Early assessment with physical exam and gastroenterology referral of any patient, regardless of age, presenting with symptoms or signs of colorectal cancer is critical.** Please see the Signs & Symptoms box above.
3. **Education of patients as to basic digestive health, the understanding of what and where the colon is, and the need to take these symptoms seriously should be part of regular office visits, especially yearly exams, and anticipatory guidance.** It is important to reiterate to patients that rectal bleeding and blood in stool is never normal and needs further assessment by their doctor to determine the source of the blood.
4. **Help all clinical staff members and patients understand the risk factors associated with a family history of colorectal cancer and/or advanced adenomas.**

¹ Siegel, R et al. Colorectal Cancer Incidence Patterns in the United States, 1974-2013 JNCI J Natl Cancer Inst (2017) 109(8): djw322.

² Araghi, M et al. The future burden of colorectal cancer among US blacks and whites. *Journal of the National Cancer Institute*, Volume 110, Issue 7, 1 July 2018, Pages 791–793.

³ Siegel, R. et al. Colorectal Mortality rates in adults age 20 to 54 in the united states, 1970-2014. JAMA. 8 August 2017, Vol 318, number 6

⁴ Hamilton, WT et al. Clinical features of bowel disease in patients aged <50 years in primary care: a large case-control study. *British Journal of General Practice*, May 2017.

⁵ Wolf AMD et al Colorectal Cancer Screening for Average-Risk adults: 2018 Guideline Update from the American Cancer Society. *CA Cancer Journal* 2018 68 250-281

⁶ Graff RE Familial Risk and Heritability of Colorectal Cancer in the Nordic Twin Study of Cancer. *Clin Gastroenterol Hepatol* 2017 15 1256-1264

⁷ Lowery JT et al. Understanding the Contribution of Family History to Colorectal Cancer Risk and Its Clinical Implications: A State-of-the-Science Review. *Cancer* September 2016

⁸ Pearlman r et al Prevalence and Spectrum of Germline Cancer Susceptibility Gene Mutations Among Patients with Early -Onset Colorectal Cancer. *JAMA Oncology* 2017 3 464-71

⁹ Cottet V et al. Colonoscopic screening of first-degree relatives of patients with large adenomas: increased risk of colorectal tumors. *Gastroenterology*. 2007;133:1086-1092.