

Colorectal Cancer Prevention

Division of Cancer Epidemiology - Facts and Stats

Epidemiology of colorectal cancer

Colorectal cancer is the third most common cancer worldwide, accounting for 880,792 (9.2%) cancer-related deaths in 2018.¹

In Canada, an estimated 26,900 people will develop colorectal cancer by the end of 2020.² Risk factors for colorectal cancer include a family or personal history of colorectal cancer, an elevated body mass index, heavy alcohol consumption, smoking, and frequent consumption of large amounts of processed red meat.³ As colorectal cancers progress from stage 1 to 4, the 5-year survival rate drops from 92% to 12%.² Nonetheless, the increased risk of fatality associated with disease progression is preventable through regular screening.

SCREENING METHODS

There are several methods available to screen for colorectal cancer. A colonoscopy, known for its invasiveness, is a procedure whereby a physician inspects an individual's entire colon using a thin, long tube with a camera at the end. Beyond visualization of precancerous polyps, colonoscopies allow for immediate biopsy or removal of tissue for testing. A lesser-known test for colorectal cancer referred to as FIT (fecal immunochemical test) detects small amounts of blood from pre-cancerous polyps in one's stool. A sigmoidoscopy is another screening procedure that uses the same visualization method as that of a colonoscopy, but allows for visualization of the sigmoid colon, the most common site of colon cancers, rather than the entire colon.⁴

SCREENING BASED ON RISK

Different screening methods are employed in varying frequency according to an individual's risk of developing colon cancer. A common misconception is that screening for colorectal cancer requires regular colonoscopies; however, the recommended screening method for asymptomatic individuals with average risk of developing colorectal cancer is FIT every 2 years beginning at the age of 60. A colonoscopy is only recommended if a FIT yields abnormal results.⁵ For individuals at high risk, those with a first-degree relative (parents or siblings) who have had colorectal cancer, it is recommended that they start undergoing colonoscopies every 5 years at the ages of 40 to 50, or at 10 years younger than the age at diagnosis of their first-degree relative.⁴

COVID-19 & SCREENING

When the COVID-19 pandemic reached Canada in March 2020, Canadian colorectal cancer screening programmes were temporarily suspended. While some colorectal cancer screening services have resumed as early as June, normal screening volumes have yet to be achieved due to social distancing requirements.⁶ A recently published, Canadian-based modelling study simulated the impact of episodic colorectal cancer screening interruptions – similar to the real, pandemic-induced screening delays – on colorectal cancer outcomes. Using this model, researchers estimated that without screening interruption, from March to August 2020, 68,000 colonoscopies would have been performed, preventing 34,000 colorectal cancer-related deaths from 2020 to 2029. However, if screening programs were interrupted for those six months, an earlier diagnosis of 19,000 colorectal cancers would have been missed, with 9,700 of these cancers being diagnosed at an advanced disease stage.⁷ A six-month interruption in screening would result in a total of 31,100 life years lost, a measurement of mortality that gives greater weight to premature deaths and lesser weight to deaths closer to the age of life expectancy.⁷ While the true impact of COVID-related colorectal cancer screening delays is unknown at this time, scientific modelling emphasizes the significance of colorectal cancer screening and the importance of returning to regular screening frequency swiftly and safely amid this unprecedented pandemic.

REFERENCES

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