Colorectal cancer: Understanding, prevention, and treatment.

Thomas Klen*

Department of Epidemiology and Population Health, Albert Einstein College of Medicine, New York,USA

Introduction

Colorectal cancer, often referred to as bowel or colon cancer, is a significant global health concern. It is the third most common cancer worldwide, affecting both men and women. In this article, we will explore the causes, risk factors, symptoms, prevention, and treatment options for colorectal cancer. Understanding this disease is crucial for early detection and better outcomes [1].

Colorectal cancer is a type of cancer that begins in the colon or rectum, both of which are part of the digestive system. The cancer typically begins as benign growths known as polyps, which, over time, can turn cancerous. Colorectal cancer often progresses slowly, giving healthcare providers an opportunity to detect it in the early stages when treatment is most effective [2].

The risk of colorectal cancer increases with age, with most cases diagnosed in people over 50. However, cases in younger individuals have been on the rise, making regular screenings essential for everyone. A family history of colorectal cancer or certain hereditary conditions, such as Lynch syndrome or familial adenomatous polyposis, can significantly increase one's risk. A diet high in red meat and processed foods, and low in fiber, fruits, and vegetables, has been associated with a higher risk of colorectal cancer. Being overweight or obese increases the risk of developing colorectal cancer. Smoking and excessive alcohol consumption are linked to a higher risk of colorectal cancer. A sedentary lifestyle may contribute to the development of colorectal cancer. Conditions like Crohn's disease or ulcerative colitis can increase the risk of colorectal cancer [3].

Colorectal cancer often remains asymptomatic in its early stages. However, as the disease progresses, various symptoms may become evident, including, Persistent diarrhea, constipation, or changes in the size and shape of stool should raise concerns. The presence of blood in the stool, whether bright red or dark, should not be ignored. Cramps, bloating, or persistent abdominal pain can be indicative of colorectal cancer. A sudden, unexplained drop in weight can be a warning sign. Ongoing fatigue and weakness may be related to anemia, which is a common symptom of colorectal cancer. Low levels of iron in the blood may suggest an issue in the colon or rectum [4].

It is crucial to consult a healthcare professional if any of these symptoms persist, as early diagnosis can significantly improve the prognosis.

Preventing colorectal cancer involves a combination of lifestyle modifications and regular screenings. Here are some key prevention and screening strategies. Consuming a diet rich in fruits, vegetables, whole grains, and low in red meat and processed foods can reduce your risk. Engaging in regular physical activity can help maintain a healthy weight and lower the risk of colorectal cancer. Quit smoking and limit alcohol intake to reduce your risk. Regular screenings are essential, particularly for individuals aged 50 and older [5].

Conclusion

Colorectal cancer is a significant health concern, but with the right awareness, prevention strategies, and early detection through screenings, its impact can be reduced. Understanding the risk factors and recognizing the symptoms is crucial for timely diagnosis and successful treatment. A healthy lifestyle, including a balanced diet, regular exercise, and avoidance of smoking and excessive alcohol consumption, can significantly lower the risk of colorectal cancer. Additionally, routine screenings for those at risk, along with advancements in treatment options, offer hope in the fight against this disease.

References

1. Quek XC, Thomson DW, Maag JL, et al. LncRNAdb v2. 0: Expanding the reference database for functional long noncoding RNAs. Nucleic Acids Res. 2014;43:168-73.

2. Amaral PP, Clark MB, Gascoigne DK, et al. LncRNAdb: A reference database for long noncoding RNAs. Nucleic Acids Res. 2011;39:146-51.

3. Xie B, Ding Q, Han H, et al. miRCancer: A microRNA-cancer association database constructed by text mining on literature. Bioinformatics. 2013;29:638-44.

4. Xie B, Ding Q, Wu D. Text mining on big and complex biomedical literature. Big Data Anal Bioinform. Healthc. 2014.

5. Brody H. Colorectal cancer. Nature. 2015;521(7551):S1.

*Corresponding Author: Thomas Klen, Department of Epidemiology and Population Health, Albert Einstein College of Medicine, New York,USA. Email: klent34@einsteinmed.edu

Citation: Klen T. Colorectal cancer: Understanding, prevention, and treatment. J Pub Health Nutri. 2023;6(5):175