

Radiation-Associated Colon Cancer: Mini Review

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Abstract

Radiation-associated colon cancer is a rare clinical entity. We herein describe the case of a patient with radiation-related colon cancer who had gone through low anterior resection for rectal cancer following preoperative radiotherapy. Few characteristics of radiation-related colon most cancers are highlighted.

Keywords: Gastrointestinal tract • Rectal cancer • Tumor genesis

Introduction

Radiotherapy performs an essential role within the treatment of numerous sufferers with pelvic malignancies, together with anorectal, urological and gynecological cancers [1]. Approximately 70% of cancer patients undergo radiotherapy for these malignancies to prolong sickness-unfastened survival and decrease local recurrence [2,3]. But, radiotherapy may result in significant damage of the normal tissues in the radiation field. The gastrointestinal tract is a radiosensitive organ within the pelvis and regularly proves to be the major proscribing factor when determining tolerance to radiation therapy.

One of the long-time period complications of radiotherapy for pelvic malignancies is the improvement of large bowel cancer [4,5]. Although the precise incidence of this complication and the mechanisms of tumorigenesis have no longer been fully elucidated, a near association among radiation and the development of colorectal most cancers (CRC) has been demonstrated [6]. Post-irradiation cancer is currently termed radiation-associated cancer, as other predisposing elements, inclusive of lymphedema, adjuvant chemotherapy and genetic abnormalities may be involved [7].

As most radiation remedies are directed to the pelvis, the rectum is at unique risk of injury. The sigmoid colon is also a common site of involvement because of its constant position on the pelvic brim, and is in all likely to receive a higher dose of radiation [8]. The prevalence of colon and anorectal cancer following pelvic irradiation has been reported, and the general public of the cases had been encountered among ladies who had undergone previous radiation therapy for gynecological cancers, consisting of uterine cervical cancer. Although preoperative chemo radiotherapy (CRT) is currently the usual remedy for locally advanced rectal cancer, little interest has been paid to the prevalence of colon cancer following CRT for rectal cancer. We herein describe a case of suspected radiation-related sigmoid colon cancer following radiotherapy for locally advanced rectal cancer.

Conclusion

The increased risk of CRC may additionally begin at 5 years and persist for >50 years after irradiation. For cases of persistent proctocolitis, along

with colonic stricture, fistulae and strange bowel motion, lengthy-time period surveillance with a colonoscope must be taken into consideration after irradiation in patient present process previous pelvic radiotherapy.

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