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## A Review on Rectal Cancer

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## Editorial

The second most prevalent malignancy in the large intestine is rectal cancer. Rectal cancer has become one of the world's significant health problems due to its incidence and high number of young individuals diagnosed. Each year, a number of additional cases are diagnosed as a result of greater access to and usage of contemporary screening methods. Rectal tumour management and therapy differs from tumours in other areas of the gastrointestinal system or even the colon due to the location of the rectum and its surrounding organs. We'll go over the latest news on rectal cancer, including epidemiology, risk factors, clinical manifestations, screening, and staging in this post. Diagnostic methods, as well as the most up-to-date treatment modalities and approaches, will be thoroughly reviewed.

Rectal cancer is the second most prevalent cancer in the large intestine and one of the most common human malignant neoplasms. Colorectal cancers (CRCs) are the second most frequent cancer in humans and one of the most serious public health issues in the world [1].

Because the colon and the rectum have separate embryonic origins, malignancies developing from these two parts of the large bowel have diverse characteristics. The midget gives way to the colon, and the hindgut to the rectum. Hormone receptor gradients differ as well. These two also serve various purposes. The rectum is directly exposed to a higher concentration of faeces. Furthermore, alkaline mucus coats undigested materials passing through the colon. The pH levels in the colon and rectum may potentially have an impact on susceptibility to environmental influences. As a result, several risk factors may be involved in the development of malignant tumours [2].

Rectal tumours may show with unique clinical signs compared to other cancers of the gastrointestinal tract due to the rectum's placement within the pelvic cavity and its relationship with genitourinary organs. The diagnosis and treatment of rectal tumours as a separate entity from other regions of the colon has received a lot of attention in recent years. These malignancies can be detected at an earlier stage thanks to rectosigmoidoscopy and novel imaging modalities. In these individuals, multimodal therapeutic techniques such as surgery, preoperative and postoperative chemo- or radiotherapies have resulted in improved survival [3].

Between the sigmoid colon and the anal canal is the rectum, which is the last part of the large intestine. It runs from the recto sigmoid junction to the anorectic ring, which is located at the level of the third sacral vertebra or sacral promontory. It measures 12-15 cm in length and has an internal diameter similar to that of the sigmoid colon. The rectal ampulla forms when it dilates at its end [4].

After proximal colon cancers (42 percent), rectal tumours are the second most prevalent malignancy in the large intestine (28 percent). As a result, rectal tumours have always been included in CRC epidemiological research. CRC is the third most frequent cancer in males and the second most prevalent cancer in women in the globe, with a lifetime risk of 4.7-5 percent. It's also the third biggest cause of cancer death in both men and women in the US [5]. The main findings in this study can be summarized as follows: Among patients 75 years or older, distant metastases were diagnosed less frequently than in younger patients. Older patients underwent abdominal surgery less frequently but they had more HA:s than younger patients. Preoperative radiotherapy was used for 34% of patients  $\geq$ 75 years, compared with 67% of younger patients. Older patients had lower relative survival 90 days postoperatively and lower relative five-year survival among all patients, among patients with abdominal tumor resection, and among patients with curative operation. Local recurrence rate did not, however, differ significantly between the two age groups [6,7].

The SRCR covers nearly 100% of rectal cancer patients in Sweden, providing an adequate description of the management of rectal cancer in a defined population. It has the possibility to use personnumbers, unique for each resident in Sweden. The register is validated and the quality of data has been shown to be acceptable. This makes descriptive data from this register of interest when planning studies validating future treatment programs for rectal cancer [8]. The SRCR is nationwide and therefore the data input is limited to ensure acceptable registration compliance. American Association of Anaesthesiologists (ASA) classification has been added to the registry in 2007. This information could have been helpful in trying to understand some of the results of our study, since older patients are expected to have more comorbidity, as shown in previous studies.

Local recurrence rate in our audit was calculated using a cohort different from the main cohort. The reason for this is the method of gathering information about local recurrence from colorectal units to Regional Oncologic Centres yearly, asking for local recurrence data for every patient five years post year of surgery [9,10].

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**Conflict of Interest** 

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