TO STUDY THE CLINICAL PROFILE AND MANAGEMENT OF CARCINOMA RECTUM

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ABSTRACT
Background: Rectal cancer accounts for one third of all colorectal cancers. In Wardha region of India, the exact status of the condition is unknown hence the present study was undertaken to observe the clinical presentation of carcinoma of the rectum and stage of malignancy at the time of diagnosis in the population of in and around the Wardha region of India. **Materials & Methods:** A total of 33 patients of Carcinoma of rectum who reported in the OPD were part of the study. After detailed history, clinical examination, laboratory investigations and biopsy diagnosis was confirmed. Results: Mean age of the patients was 47.5 years and male predominance was seen. Most of the patients reported at stage IV. 1st symptom was bleeding per rectum. Majority of cases were operable. 61% (17) were treated with neoadjuvent chemotherapy followed by APR with colostomy, 10 % (3) were treated with neoadjuvent chemotherapy followed by anterior resection, in 15% (5) patient palliative colostomy was done and 9% (3) of patients were given palliative chemotherapy. **Conclusion:** Elderly patients with history of bleeding per rectum and any alteration in bowel habits should be screened meticulously for carcinoma rectum. This may help in diagnosing rectal carcinoma in early stage.

KEYWORDS :

INTRODUCTION

Rectal cancer accounts for one third of all colorectal cancers. In the USA 41420 new rectal cancer cases were estimated in 2007.[1] The age adjusted death rate from colorectal cancer has declined over recent decades due to a combination of colorectal cancer screening, improved diagnostic tests, improved standardized surgical technique, improved medical support, neoadjuvant chemotherapy and radiation treatment or combinations of these.[2] Because of complex treatment algorithms, use of multidisciplinary teams in the management of rectal cancer patients has also been popularized.[3]

Medical gastroenterologists performing colonoscopies are frequently the first health care provider to raise the suspicion of a rectal cancer. Although the diagnosis depends on histological confirmation, the endoscopic presentation is almost diagnostic in many cases. In order to meet the patient's immediate needs for information, it is important that the endoscopist has knowledge about the investigations and treatment options that will be required for their patients.

The three decisions that should be made initially include: whether the tumor is suitable for local therapy; whether preoperative therapy is required; and whether a permanent stoma is necessary. Severe comorbidities and poor health status can be a relative contraindication to abdominal surgery.

These investigations will help the surgeon and his multidisciplinary team to determine:

(1) The patient's health condition and comorbidities;
(2) The stage of the rectal cancer; and
(3) Which treatment option is best suited to meet the patient's preferences and at the same time be oncologically appropriate.

Present study was undertaken to observe the clinical presentation of carcinoma of the rectum and stage of malignancy at the time of diagnosis in the population of in and around the Wardha region of India. Different modalities of management of carcinoma rectum and indications and effectivity of chemotherapy in the management of carcinoma of the rectum were also studied.

MATERIALS AND METHODS

The present observational study was conducted in a tertiary health care centre- Acharya Vinobha Bhave Rural Hospital (AVBRH), Sawangi Meghe Wardha. A total of 33 patients reported in the OPD. All these patients which were from Wardha and surrounding region with Carcinoma of the rectum coming to Acharya Vinoba Bhave Rural Hospital (AVBRH) were included in study. Cases of concomitant malignancy of the colon and anal canal were excluded from the study. All the cases were evaluated by clinical examination. Detailed

laboratory investigations were performed and the diagnosis was confirmed after Biopsy. Staging was done by endorectal ultrasound and CT scan. Patient was assessed periodically, and was followed during the study period, clinically and by appropriate investigation. The follow up period was from august 2013 to September 2015.

RESULTS AND DISCUSSION

During this period 142 cases of gastrointestinal malignancy were diagnosed in our center out of which carcinoma rectum accounted for 33 patients. Incidence of carcinoma rectum found to be 23.24% of all gastrointestinal malignancies. In the present study, maximum number of patients (34%) was found in 41-50 year age group. The incidence was highest in 5th decade of life. The youngest patient was 22 year old and the oldest was 73 year old. The mean age was 47.5 years. The mean age of occurrence appears to be lower when compared to western series.

Seung-gu yeo et al found that the median age of the patients was 61 years (range, 42–71).[4] C. Tiselius1et al found the median age for the study population was 66.5 (57.6–75.3) years.[5] However in the study of Deo S et al mean age of the patients was 45.4 years and bears the similarity to present study.[6]

In present study, the incidence of carcinoma of the rectum was found to be more in males, and the male to female ratio was 4.5:1. The same has been the observation of C. Anderin et al; there were more men than women (61.5% vs. 38.5% in there study.[7] S. H. Kho et al found, the incidence of rectal cancer is higher in men (57.9%) when compared to women (42.1%), with women also showing an improved survival compared to men, 51.0% to 48.5% at 5 years.[8]

The early stage rectal carcinoma is asymptomatic. The first symptom in majority of the patients is bleeding per rectum. There are no specific features of bleeding per rectum due to carcinoma rectum and is often mistaken for more frequent cause of bleeding i.e hemorrhoids. In present study, all the patients with carcinoma rectum presented with bleeding per rectum followed by rectal pain in 84% (28), and alteration in bowel habits 63% (21). However, sense of incomplete evacuation 54% (18) and 48% (16) with diarrhea. Average duration of bleeding per rectum was 4-5 months. The suspicion of malignancy was strengthened when this bleeding per rectum was accompanied by alteration in bowel habits, spurious diarrhoea and rectal pain. Rectal pain was a symptom of late stage malignancy s/o extra rectal spread. Other symptoms noted by our patients were weight loss 97% (32), reduced appetite 81% (27). Curless R et al found that in rectal cancer the following symptoms were more common in the young group: tenesmus (odds ratio 4.2; 95% confidence intervals 2.0-10.0), abdominal orrectal pain (4.0; 1.9-10.6), change in flatus production (2.6; 1.3-5.8), and passage of mucus per rectum (2.2; 1.1-4.8).

Anorexia was more common in the elderly patients (0.4; 0.1-0.8). Curless R et all found that Anorexia was more common in the elderly patients (0.4; 0.1-0.8). [9]

Carcinoma of the rectum remains confined to rectum and perirectal tissue, in its evolution and dissemination of malignancy and distant spread is seen less often. In present study, there were 9% of the patients who had hepatomegaly and ascites. No patient of pulmonary secondaries was found in the study. 24 out of 33 patients had anemia with mean hemoglobin level of 7.8 gm/dl. In the present study, most of the patients presented in late stage i.e stage iv 39.5% (13), followed by 36.5% (10) in stage III, 15% patient in stage II and only 9%(3) in early stage. Nath j et al found Younger patients undergoing surgery had a higher pathological T stage (T0-2 18.9%, T3 62.3%, T4 19.7% vs 34.5%, 56.0%, 9.5%) (P = 0.027) and more advanced pathological N stage (N0 31.1%, N1 41.0%, N2 27.9% vs 53.4%, 26.7%, 17.2%) (P = 0.014).10 Deo s et al found majority of rectal cancer patients present with locally advanced and low rectal growths leading to low sphincter salvage rates. [6]

In the present study, 61% (17) were treated with neoadjuvent chemotherapy followed by APR with colostomy, 10 % (3) were treated with neoadjuvent chemotherapy followed by anterior resection, in 15% (5) patient palliative colostomy was done and 9% (3) of patients were given palliative chemotherapy. 5 of patients were diagnosed in advanced stage with poor general conditions, so no intervention was done other than symptomatic treatment. Sphincter preserving surgery in form of total mesorectal excision and anterior resection are indicated for carcinoma of upper and middle rectum. 17 0f our patients who underwent abdominoperineal resection, belonged to stage II and III. Out of them 10 patients had total clearance of malignancy. On histopathological examination 2 of the excised specimen showed positive margin for infiltration. All patients who underwent APR received 6 cycles FOLFOX regimen. 7 patients had recurrence diagnosed on CECT abdomen during the follow up period. The patients who had recurrence were given radiotherapy. C. Tiselius et al found the 5-year overall survival was 65.8% for patients having adjuvant chemotherapy compared with 45.6% patients not treated with chemotherapy. [5]

With increasing awareness and use of endoscopy, rectal cancer are being diagnosed at an early stage (T1/2 N0M0) and sphincter preserving procedures like total mesorectal excision and anterior resection are used for the management of this category of patients. Only 2 of our patients were found suitable for anterior resection. The use of neoadjuvant chemotherapy and chemo radiation is advised for treatment of stage II and III patients. Aim of this is to downgrade tumour and prevent local recurrence. In the present study, all the operable patients received neoadjuvant and adjuvant chemotherapy. Amongst 13 inoperable patients, 8 patients were given palliative chemotherapy. C. Anderin et al had mean follow-up period of 6.4 years, the cumulative incidence of local recurrence rates at 5 years was 9.0%. 7 Deo s et al found local recurrence rate was 8.9%. 5-year disease free and overall survival was 54% and 58% respectively.6

In the present study, 2 of our patients underwent APR had positive margin on histopathology, they received chemo radiation post operatively and could not survive for 6 months, and out of the 18 patients who had total clearance on histopathology 5 patients developed local recurrence and they were diagnosed on follow up by CECT abdomen and had received chemo radiation. 13 patients (65%) who had total clearance of margin on APR and received adjuvant chemotherapy remained disease free during the follow up. C. Tiselius et al found that the 5-year overall survival was 65.8% for patients receiving adjuvant chemotherapy compared with 45.6% for patients not treated with chemotherapy.5 In present study, 35% patient died amongst operable group after 9 months of follow up and all patients died after 9 month amongst inoperable group. Inoperable patients despite of chemo radiation had poor survival and no patient survived 9 months. C. Anderin et al The estimated overall survival in resection performed at 5 years was 49.3% in the APE group. [7]

In present study, 60 % patients had no early complication, 15 % had perineal wound infection, 10% had hypoproteinaemia and laparotomy wound infection, only 5% had sign of septicemia. Sepsis was controlled by appropriate antibiotics on the basis of culture sensitivity reports. Only 1 patient had complete wound dediscene and required secondary suturing. C. Anderin et al found that in total, 41.5% of the patients had some complication in relation to the GMF within 30 days after surgery. The most common complication was a minor perineal wound infection, defined as a swelling of the wound or surrounding tissue with purulent discharge, and was seen in 23.1% of the patients. These infections healed normally within a few weeks after discharge (range: 5-25 weeks). [7]

In present study, no late complication observed in 55% of patient, late complications like incisional hernia was found in 15% of the patients, erectile dysfunction; prolapse colostomy was found in 5% (1 patient each). Out of 8 inoperable patients, in 5 patients palliative colostomy was done. All the 8 patients were given palliative chemotherapy. At the end of chemotherapy patients were assessed by DRE and CECT abdomen. CECT showed no significant regression in malignancy.

CONCLUSION

In the region mean age for carcinoma rectus is 47.5 years with male predominance. Most of the patients report at stage IV. Majority of cases are operable. Palliative chemotherapy in patients with advanced disease is the only modality of treatment and no lasting response can be seen after chemo radiation. Adjuvant chemotherapy does help in down staging of malignancy. 5 year survival cannot be commented upon even in patients who had total eradication of malignancy after APR and chemotherapy since the follow-up period was limited in the study. Elderly patients with history of bleeding per rectum and any alteration in bowel habits should be screened meticulously for carcinoma rectum. This may help in diagnosing rectal carcinoma in early stage.

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