

## **Original Research Article**

### **CLINICAL PRESENTATION OF PATIENTS OF CARCINOMA OF RECTUM AND DIFFERENT MODALITIES OF TREATMENT**

#### **ABSTRACT**

**Objectives:** To determine the clinical presentation of patients of Carcinoma of Rectum and Different modalities of treatment. **Methodology:** This was a Prospective observational study conducted in from May 2019 to April 2021 at Liaquat University of Medical and Health Sciences (LUMHS) Jamshoro, Sindh, Pakistan. The study comprises 50 patients. All were admitted from Outpatient Department (OPD). All patients were evaluated fully after history & Clinical examinations Digital Rectal Examination (DRE) with Proctoscope and specific investigations of, Stool DR, Fecal occult blood, ultra sound of abdomen and pelvis, Sigmoidoscopy, Colonoscopy with biopsy, Barium enema, C T Scan of Abdomen, chest & pelvis, MRI Abdomen & Pelvis, PECT Scan, Anorectal or Endoluminal Ultra sound, Tumor Marker CEA, Monoclonal Antibodies, LDH level, LFT for liver. and X- Ray chest PA view. Complete blood picture (CBC) Blood urea, sugar, serum electrolyte, HBSAG, HCV, & HIV, COVID -19, LFT, PT, APTT, INR and ECG for fitness purpose and general assessment. **Results:** In this study 50 patients of carcinoma of Rectum were reported. The maximum number of patients were in age group between 12 to 80 years. Out of 50 patient, 15 patients were presented with Altered Bowel habit (Constipation and Diarrhea) & Spurious Morning Diarrhea, 13 patients were presented with Altered Bowel habit (Constipation & Diarrhea) Spurious Morning Diarrhea, With Bleeding per rectum. Out of 50 patients 15 patients were diagnosed stage I, 13 patients were diagnosed stage II, 9 patients were diagnosed stage III, 13 patients were diagnosed stage IV. Out of 50 patients 28 patients were treated with anterior resection, 15 patients initially treated with Neo adjuvant therapy followed by patients were treated APR with TME, immunotherapy, gene therapy. 4 patients were treated initially diversion colostomy, then Neo adjuvant therapy, 3 patients were treated laparotomy, colostomy, Hartmann procedure, Chemo radio therapy, Immunotherapy, Gene therapy. **Conclusion:** Carcinoma of Rectum is a common problem all over the world. Patients of carcinoma rectum can present diarrhea, constipation, bleeding per rectum, spurious morning diarrhea if not diagnose, and treat the patient in early stage, patients live style will be complicated.

**KEY WORDS:** Carcinoma of rectum, Clinical presentation, Treatment modalities.

#### **INTRODUCTION**

Carcinoma of rectum is a serious and critical problem all over the world wide .because those patients who have strong family history of familial adenomatous polyposis disease who is high risk or patients diagnosed villous or tubular type of adenoma, juvenile adenoma<sup>1</sup>. Non Hereditary familial adenomatous polyposis coli ,Gardener Syndrome <sup>2</sup> , Turcot Syndrome or patient having history of fatty diet, history of cholecystectomy Ileal resection are a predisposing factor for development of carcinoma of rectum <sup>3</sup>,carcinoma of rectum can occur upper part ,middle part ,lower part of rectum ,patients can presented with Altered Bowel habit (Constipation & Diarrhea) & Spurious Morning Diarrhea, Bleeding per rectum, weight loss , Secondary's in the liver, pain with intestinal obstruction ,lump in left Iliac fossa <sup>4</sup> Differential diagnosis of carcinoma of rectum anal carcinoma, lymphoma, sarcoma ,carcinoid tumor ,solitary rectal ulcer, shistosomiasis , ectopic endometrium ,rectal polyp<sup>5</sup>. Diagnosis of Carcinoma rectum is depend on History ,Clinical Examination ,and investigation). All patients were evaluated fully after history & Clinical examinations Digital Rectal Examination (DRE) with Proctoscope and specific investigations of ,Stool DR Fecal occult blood, ultra sound of abdomen and pelvis, Sigmoidoscopy ,Colonoscopy for synchronous or Metacronous tumor with biopsy for diagnosis of carcinoma of Rectum ,<sup>6</sup> Barium enema for Road map, Computer Tomography (C T ) Scan of Abdomen ,chest & pelvis, Magnetic Resonance Image (MRI) Abdomen &Pelvis ,PECT Scan, Endorectal or Endoluminal Ultra sound, Tumor Marker Carcinoembryonic antigen (CEA),Monoclonal Antibodies, Lactate Dehydrogenase Hormone (LDH ) level, Liver function test (LFT) for liver for secondary's and all for Staging purpose.<sup>7,8</sup> Type of rectal carcinoma are ,Annular ,Tubular, Cauliflower ,and Fun gratings type. Prognosis of tumor depend on (TNM)Tumor, Node and Metastasis. classification, Dukes classification, Histological grading, well differentiated, moderately differentiated and poorly differentiated carcinoma of rectum.<sup>9</sup> For fitness purpose; need of some investigation. X- Ray chest PA view. Complete blood picture (CBC) Blood urea, sugar, serum electrolyte, HBSAG, HCV, & HIV, COVID -19, LFT, Prothrombin Time (PT) Activated partial Thermoblastin Time (APTT), International Normalized ratio (INR) and ECG, Ecocardiography. and general assessment. After fitness patients treated different way. Anterior Resection, Low anterior Resection, Abdominal Total Mesorectal Excision, Trans anal Total mesorectal Excision <sup>10</sup>, Low anal stapling circular gun anastomosis, diversion Colostomy, Hartman's procedure, Laparoscopic & endoscopic tumor resection, New adjuvant, Adjuvant chemotherapy, Radiotherapy, Immunotherapy and Gene therapy,<sup>11,12</sup> after primary treatment of patients of carcinoma of rectum then need of follow up regularly monthly, six monthly, then yearly up to 2 years.

## METHODOLOGY

It was a Prospective observational study carried out at surgical ward at liaquat university of medical and health sciences Hyderabad /Jamshoro from May 2019 to April 2021. All patients were evaluated fully after history & Clinical examinations Digital Rectal Examination (DRE) with Proctoscope and specific investigations of, Stool DR Fecal

occult blood, ultra sound of abdomen and pelvis, Sigmoidoscopy, Colonoscopy with biopsy, Barium enema, C T Scan of Abdomen, chest & pelvis, MRI Abdomen & Pelvis, PECT Scan, Anorectal or Endoluminal Ultra sound, Tumor Marker CEA, Monoclonal Antibodies, LDH level, LFT for liver. For fitness purpose; X- Ray chest PA view. Complete blood picture (CBC) Blood urea, sugar, serum electrolyte, HBSAG, HCV, & HIV, COVID -19, LFT, PT, APTT, INR and ECG. and general assessment. were taken and recorded on a Performa designed for the study. Statistical package for social sciences (SPSS) version 10 was used for statistical analysis of the data.

## RESULTS

In this study 50 patients of carcinoma of Rectum. The maximum number of patients were in age group between 12 to 80 years. Out of 50 patients .11 patients were presented with age group between 12 to 30 year, 19 patients were presented with age group between 31 to 45 years, 15 patients were presented with age group between 46 to 65, 5 patients were presented with age group between 66 to 80 year. Out of 50 patients, 15 patients were presented with Altered Bowel habit (Constipation & Diarrhea) & Spurious Morning Diarrhea, 13 patients were presented with Altered Bowel habit (Constipation & Diarrhea) Spurious Morning Diarrhea, With Bleeding per rectum ,9 patients were presented with Altered Bowel habit (Constipation & Diarrhea) & Spurious Morning Diarrhea, bleeding per rectum, Pruritus, pain & Weight Loss. 6 patients were presented with Altered Bowel habit (Constipation & Diarrhea) & Spurious Morning Diarrhea, bleeding per rectum ,pruritus ,pain, weight loss, secondary's in the liver ,4 patients were presented with Altered Bowel habit (Constipation & Diarrhea) & Spurious Morning Diarrhea, bleeding per rectum ,pruritus, pain ,weight loss, sub-acute intestinal obstruction , 3 patients were presented with Altered Bowel habit (Constipation & Diarrhea) & Spurious Morning Diarrhea, Bleeding per rectum, weight loss ,with intestinal obstruction . Out of 50 patients 15 patients were diagnosed stage 1 ,13 patients were diagnosed stage 2, 9 patients were diagnosed stage 111, 13 patients were diagnosed stage 4. Out of 50 patients 28 patients were treated with anterior resection, 15 patients initially treated with New adjuvant therapy followed by patients were treated APR with TME, immunotherapy, gene therapy, 4 patients were treated initially diversion colostomy, then adjuvant therapy, 3 patients were treated laparotomy, colostomy, hart men procedure, Chemo radio therapy, Immunotherapy, Gene therapy.

**Table 1: Age wise distribution of the patients (n = 50)**

Age of the Patients	No of Patients	Percentage %
12 to 30 year	11	22 .0%
31 to 45 year	19	38.0%
46 to 65 year	15	30.0%
66 to 80 year	5	10 .0%

**Table 2. Clinical presentation of the patients (n=50)**

<b>Clinical presentation</b>	<b>No of Patients</b>	<b>Percentage</b>
Altered bowel habit ( Constipation &diarrhea) Spurious morning diarrhea	15	30.0%
Altered bowel habit ( Constipation &diarrhea) Spurious morning diarrhea with Bleeding per rectum	13	26.0%
Altered bowel habit ( Constipation &diarrhea) Spurious morning diarrhea, bleeding per rectum ,pruritus .pain & weight loss	9	18.0%
Altered bowel habit ( Constipation &diarrhea) Spurious morning diarrhea, bleeding per rectum, pruritus, pain, weight loss ,secondary's in liver	6	12.0%
Altered bowel habit ( Constipation &diarrhea) Spurious morning diarrhea ,bleeding per rectum ,pruritus, pain, weight loss with sub Intestinal obstruction	4	8.0%
Altered bowel habit ( Constipation &diarrhea) Spurious morning diarrhea ,bleeding per rectum ,pruritus, pain, weight loss with Intestinal obstruction	3	6.0%

**Table 3. Stages of the disease (n = 50)**

<b>Stage</b>	<b>No of Patients</b>	<b>Percentage %</b>
Stage 1	15	30.0%
Stage 11	13	26.0%
Stage 111	8	16.0%
Stage 1V	13	26%

**Table 4. Treatment Options (n =50)**

<b>Treatment options</b>	<b>No of Patients</b>	<b>Percentage%</b>
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Anterior Resections	28	56.0%
New Adjuvant Therapy , APR with TME, Immunotherapy, Gene Therapy	15	30.0%
Diversion colostomy ,chemotherapy	04	08.0%
Laparotomy, Colostomy, Hartman procedure , Chemotherapy, Radiotherapy, Immunotherapy ,Gene therapy	03	06.0%

## DISCUSSION

Carcinoma of Rectum is a common problem all over the world commonly seen in those patients who have strong family history, history of familial adenomatous polyposis coli, taking low fiber diet, high fat diet, low antioxidant substance in diet<sup>13</sup>, patient were presented in different way, common presentation are altered bowel habit Constipation, diarrhea, Spurious morning diarrhea, bleeding per rectum, pruritus, Decrease appetite, loss of weight, pain in abdomen, jaundice, ascites, intestinal obstruction, uremia, hemoptysis,<sup>14</sup> if not evaluated on the basis of history, clinical examination, investigation, i-e typical altered bowel habits, spurious morning diarrhea, Bleeding per rectum, loss of weight, On digital Rectal examination, growth can be felt on finger tip, as well blood seen on the tip of finger, on sigmoidoscopy, colonoscopy<sup>15,16</sup>, synchronous, metachronous tumor taking biopsy for histopathology, of type of tumor Annular, Tubular, cauliflower, and ulcerative, well differentiated, moderately differentiated, poorly differentiated carcinoma of rectum then stage the disease Ultrasound of abdomen, Endorectal ultrasound, CT scan of chest & abdomen, MRI abdomen, Positron emission computed tomography Liver function test, monoclonal antibodies, patient treated according to stage, anterior resection, low anterior resection, stapling gun anastomosis, Total mesorectal excision, Abdomino perianal Resection, endoscopic tumor resection. Transanal local excision, chemotherapy new adjuvant, adjuvant, Radiotherapy, Immunotherapy Gene therapy.<sup>15-17</sup> Nawal A et al.<sup>18</sup> in his study age ranged between 27 to 89 years, 48(76.2) patients presented with bleeding per rectum, 15 (23.8) patients were presented with constipation, 20(31.7) patients were presented with diarrhea, 29(46.0) patients were presented with Abdominal pain, 12 (19.0) presented with weight loss, 7.3 (12.6) patients presented duration more than 12 months. Gaffor et al<sup>19</sup>. In his study has reported that

12.50% patients effected below 31 years of age ,16% bellow 31-40 years of age,19.6% effected at 41-50 years of age,26.8% effected at 51-60 years of age and 25% effected at more than 61 years of age. 71.4% of patients presented with decreased appetite,37.5% with nausea & vomiting,83.9% with loss of weight ,66.1% with bleeding per rectum 16.1% with fever,83.9 with abdominal pain,85.7% altered bowel habits,51.8% with tenesmus,58.9% with mucous in stool and 5.7% with difficulty in bowel evacuation. Razaque et al <sup>20</sup> in his study has reported that 23.3% to Dukes stage –B 43.3% to dukes stage –c, and 33.3% of dukes stage D,3,3% patients were treated by Anterior Resection,20% By Abdominoperineal resection and 76.7 by colostomy. In this study 50 patients of carcinoma of Rectum. The maximum number of patients were in age group between 12 to 80 years. Out of 50 patients 11 patients were presented with age group between 12 to 30 year, 19 patients were presented with age group between 31 to 45 years, 15 patients were presented with age group between 46 to 65, 5 patients were presented with age group between 66 to 80 year. Out of 50 patient, 15 patients were presented with Altered Bowel habit (Constipation & Diarrhea) & Spurious Morning Diarrhea , 13 patients were presented with Altered Bowel habit (Constipation & Diarrhea) Spurious Morning Diarrhea ,With Bleeding per rectum ,9 patients were presented with Altered Bowel habit (Constipation & Diarrhea) & Spurious Morning Diarrhea ,bleeding per rectum, Pruritus, pain & Weight Loss 6 patients were presented with Altered Bowel habit (Constipation & Diarrhea) & Spurious Morning Diarrhea, bleeding per rectum ,pruritus ,pain, weight loss, secondary's in the liver ,4 patients were presented with Altered Bowel habit (Constipation & Diarrhea) & Spurious Morning Diarrhea, bleeding per rectum ,pruritus, pain ,weight loss, sub acute intestinal obstruction , 3 patients were presented with Altered Bowel habit (Constipation & Diarrhea) & Spurious Morning Diarrhea, Bleeding per rectum, weight loss ,with intestinal obstruction . Out of 50 patients 15 patients were diagnosed stage I ,13 patients were diagnosed stage II, 9 patients were diagnosed stage III, 13 patients were diagnosed stage IV. Out of 50 patients 28 patients were treated with anterior resection, 15 patients initially treated with New adjuvant therapy followed by patients were treated APR with TME, immunotherapy, gene therapy, 4 patients were treated initially diversion colostomy, then adjuvant therapy, 3 patients were treated laparotomy, colostomy, hart men procedure, Chemo radio therapy, Immunotherapy, Gene therapy.

## CONCLUSION

Carcinoma of rectum is a serious problem all over the world rectal carcinoma can occur any age patients present different way either bleeding per rectum or altered bowel habits With Spurious morning diarrhea . If not diagnosed and treat early stage patients can die early without any treatment. Aims of this study if patient can diagnosed early stage on the basis of History ,clinical presentation and investigations then treat as soon as with help of surgery ,chemotherapy ,Radiotherapy ,Immunotherapy and gene therapy To avoid Morbidity and Mortality .

### **Ethical Approval:**

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

### **Consent**

As per international standard or university standard, patients' written consent has been collected and preserved by the author(s).

### **COMPETEING INTERESTS**

Authors have declared that no competing interests exist.

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UNDER PEER REVIEW