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Review Article

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Recovery Rate and Hospitalization stay patient Treated with Corticosteroids alone, along with Antiviral Oral and Intravenous – Faviparavir&Remdesivir – 40 Patients Clinical study

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Abstract

Corona Virus disease led to large devastating and other complication from root to the periphery[1]. Various complications has been achnoledged during the pandemic so far such as raised glycemic index, long term lung fibrosis and other complications such as Mucormycosis.

The various treatment modalities has been encounter so far which are as usual led to some or more beneficial effect and recovery of the patients. The corticosteroids being the most important remedy later proved to the disease enhancement and complication. In the similar way the antiviral drugs used are either Oral and intravenous not caused much of reduction n the mortality and hospitalization stay. As per the current data ad the statistics no proven drugs antiviral has been used for the SARS COVID 19, the used one which are as Favipiravir, remdesivir and Mechanical ventilation[2].

In this present study the 40 patient given treatment in three groups made treated with Corticosteroids alone, along with Antiviral Oral and Intravenous – Favipiravir & Remdesivir. After analyzing the data is found that none of the antiviral has made significant reduction in the hospitalization stay treated at IPD of chugh Multispeciality Hospital. Thus concluded that patient treated along with corticosteroids along with Antiviral oral and intravenous doesn't make any significant changes in the hospital stay.

Key Words: COVID, Pandemic, Antiviral, Oral, Intravenous, Corticosteroids, Favipiravir and Remedisivir.

How to cite this article:

Mayank Chugh, Satender Tanwar, Recovery Rate and Hospitalization stay patient Treated with Corticosteroids alone, along with Antiviral Oral and Intravenous – Faviparavir&Remdesivir – 40 Patients Clinical study. Gastroenterology International. 2018;3(1-2):5-11.

Introduction

Corona Virus disease which is being causing the wide varieties of the complication and spread through the droplet, oral, hand and air borne infection. People are getting usually infected by the spread of virus through the contaminated articles, air borne infection[3].

Mostly people doesn't require the hospitalization and recover even without any treatment andhospitalization[4]. Usually Found symptoms are such as fever, cough, myalgia, chest pain and

Tiredness. For vide varieties of modalities which are being made for the needful, as per looking in to the data and drugs used which are suggestive of the antiviral properties such as Favipiravir and remedesivir.

Favipiravir is the widely used drug for the covid 19 which has been observed as good evaluation and effective as placebo effect when compared with the other data and statistics. The extra added side effects of the known drugs has been used and evaluated for needful, in the present study no added benefitted effect has been observed in case of the Favipiravir and Remedesivir[5].

The Randomised COVID-19 Therapy (RECOVERY) trial, a multicenter, randomized, open-label trial in hospitalized patients with COVID-19, showed that the mortality from COVID-19 was lower among patients who were randomized to receive dexamethasone than among those who treated with the standard of care.[6] In SARS covid 19 the efficacy and statistics which has been used are alarming for the comparison done for the antiviral therapy[7].

However, the combination of the therapy which has been used found to be the deleterious effect and used to be very cautiously Corticosteroids has been used for the patients who are sick and need of increased oxygen demands[8].

Seven randomized controlled trials suggested that corticosteroids are found effective in the severe cases of the SARS COVID 19 Remedisivir- the dosage of the antiviral drug Remdesivir, being administered to hospitalized COVID-19 patients from the earlier six-days to five-day treatment.

According to the Health Ministry, remdesivir drug is only for restricted emergency use used with the patients those who require the oxygen therapy and increasing demands of the oxygen.

Also, the line of treatment which are been used for the effective case therapy in many cases and used , Remedesiver and Favipiravir . The Corticosteroids which are founbd to be effective needful infection[9].

Favipiravir is the drug which we are using are the againstreplication of RNA of the virus and found to be effective at certain levels[10]. In view of recent studies and discussion on favipiravir, in this mini review we aimed to summarize the clinical trials studying the efficacy and safety of favipiravir in patients with COVID-1910[11].

Data Collected - Sr No _GROUP A _GROUP B _ GROUP C _ _ _CORTICOSTEROIDS _ FAVIPIRIVIR _REMIDESIVIR _ _ _20 Patients _10 Patients _10 Patients _ _ Observations- Following Data has been collected and observations has been made such as out of 40 patients studied total, 20 patients on corticosteroids and 10 has been treated with Favipiravir and remaining 10 has been treated with Remidesivir.

Conclusions

The patients treated on Corticosteroids, favipiravir and Remedisivir as stated above has been analyzed and found that there were much significant statistical variation in the patients treated with above drugs either in the hospitalization and symptoms such as fever, cough, and respiratory distress[13]. The study may need to be conducted on large group of sample size for further understanding and variables.

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Journal of Food Additives and Contaminants	Semiannual	5000	4500	391	352
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Case Report Article

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Carcinoma colon in young female-A rare case report

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Abstract

Colorectal carcinoma is the most common malignancy of the gastrointestinal tract. The incidence of colorectal cancer increases from the fourth to the eighth decade of age. Age is the most common risk factor. A 25 year female patient arrived to casualty with complaints of distension of abdomen, pain abdomen and constipation since 15 days. Per abdomen examination showed diffusely distended abdomen with hyperperistaltic bowel sounds.MRI abdomen showed a constricting growth in descending colon for that left hemicolectomy and diversion-ileostomy was done. Carcinoma colon in young adults is uncommon in literature. Although the incidence of colorectal cancer is decreasing in elderly, there is increase in incidence of cases in people younger than 55. Hence it is told not to neglect the cases when young population arrive with symptoms of large bowel obstruction and in suspected case, screening has to be done to rule out malignancy in early stage to save the precious life..

Key Words: Carcinoma colon, Laparotomy, Hemicolectomy. Young adults, Malignancy.

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Introduction

Colorectal carcinoma is the most common malignancy of the gastrointestinal tract[1]. Worldwide, more than 1 million patients are diagnosed with colorectal cancer, with more than 500,000 associated deaths[2]. The highest rates of colorectal carcinoma predominate in the more industrialized countries .The incidence is similar in men and women and has remained fairly constant over the past 20 years. Identification of risk factors for development of colorectal cancer is essential to establish screening and surveillance programs in appropriately targeted population. Age is the most common risk factor. The incidence of colorectal cancer increases from the fourth to the eighth decade of age[3]. Most individuals present with disease after age 60 and only 10% of cancers occur in individuals younger than age 40. Approximately 80% of colorectal cancers occur sporadically, while 20% arise in patients with a known family history of colorectal cancer. Colorectal carcinoma occurs more commonly in population who consume diet high in animal fat and low in fibre. Interestingly, epidemiologic studies indicate arising proportion of right-sided colon lesions. At least two well-described genetic pathways leading to the development of colorectal adenocarcinoma namely chromosomal instability (CIN) pathway and microsatellite instability (MIN) pathway[4].

The prognosis for patients with colorectal cancer is related to the stage of disease at diagnosis and tumor histology, including differentiation, lymphatic invasion and extent of tumor-free surgical resection margins. Approximately 40% of patients treated for sporadic colorectal cancer will develop metachronous polyps and at least 6% will develop a second colorectal cancer while under surveillance[5]. Ca colon in young adult is uncommon. Here we are reporting a case with stage II Carcinoma colon which was successfully surgically managed.

Presention of Case

A 25 year female patient came to casualty with complaints of distension of abdomen, pain abdomen associated with constipation since 15 days. No history of weight loss. There was no family history of any cancer. She underwent LSCS surgery 18 months ago. No significant personal, family, drug and medical history was noted.

General physical examination revealed moderately built and nourished, conscious, orientation to time, place, person with BP 130/90 mmhg and Pulse rate of 86 bpm. Per abdomen examination Showed diffusely distended abdomen with guarding and rigidity along with hyperperistaltic bowel movements. Digital rectal examination showed roomy rectum. Laboratory investigations showed hypoalbuminaemia (2.1g/dl) and other parameters were within normal range. Erect X-Ray abdomen showed dilated large bowel.MRI Abdomen showed a constricting growth in descending colon. Later patient was taken for explorative laparotomy in which left hemicolectomy and diversion-ileostomy was done. Histopathologic examination showed as Grade 2 moderately differentiated adenocarcinoma of colon,TNM STAGE:T3 N0 M0{STAGE 2A}, Circumferential margin involved by tumour and Lymphovascular and perineural invasion present. No post-operative complications were seen. Patient discharged from the hospital on POD 7.She was advised to consult oncologist to plan for adjuvant therapy.

Discussion

Colorectal cancer is the third leading cause of cancer-related deaths in men and women, and the second most common cause of cancer deaths when men and women are combined. It is expected to cause about 53,200 deaths during 2020[6]. The death rate from colorectal cancer has been dropping in both men and women for several decades[8]. There are number of likely reasons for this. One of the reason is that colorectal polyps are now being found more often by screening and removed before they can develop into cancers, or cancers are being found earlier when they are easier to treat.

In addition, treatment for colorectal cancer has improved over the last few decades. Although the overall death rate has continued to drop, deaths from colorectal cancer among people younger than age 55 have increased 1% per year from 2008 and 2017.An article has been published by reporting a seventeen year young patient who died after 7 months of diagnosis of stage IV colorectal cancer[8]. Carcinoma colon in young adults is uncommon in literarure. Here is a case report in whom diagnosis of Carcinoma descending colon stage II helped to survive the patient by surgical management.

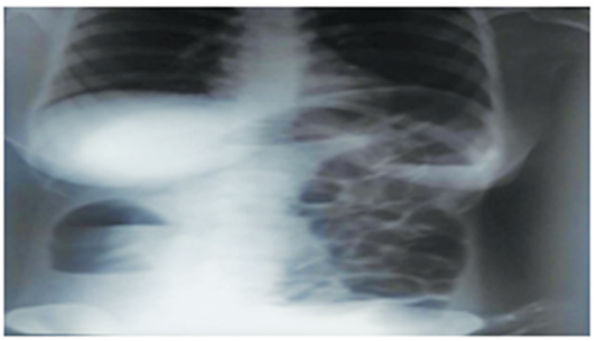

Fig 1: Erect X ray abdomen showing dilated large bowel.

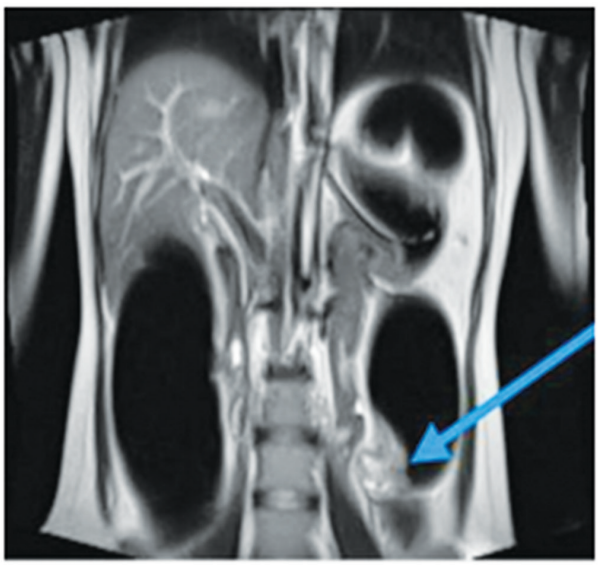

Fig 2: MRI abdomen showing growth in descending colon.

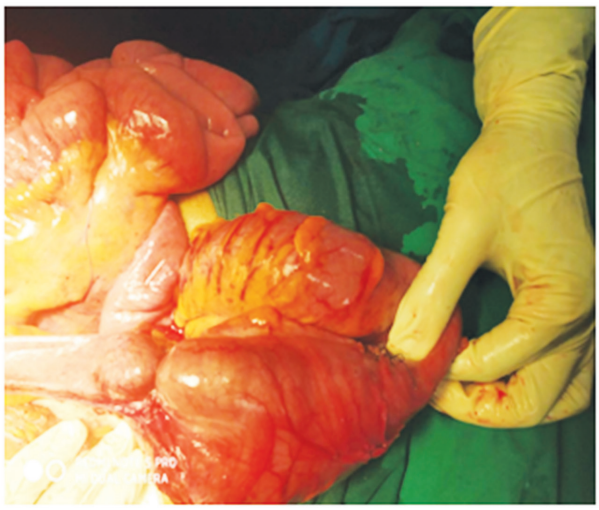

Fig3: Showing constricting growth in descending colon.

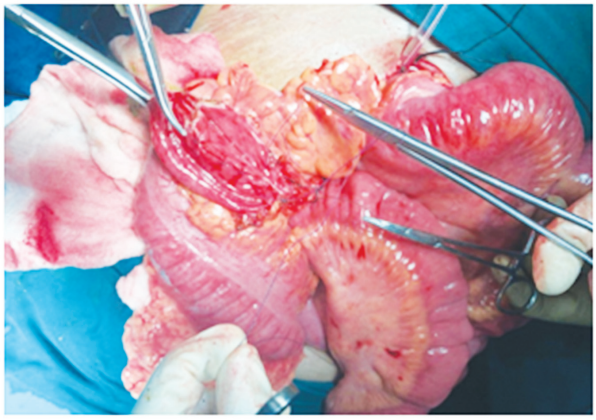

Fig 4: Showing post resection of growth.

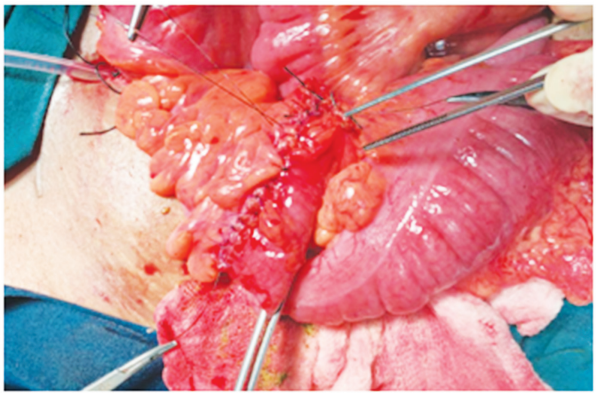

Fig 5: Showing Transverse colon – Sigmoid colon anastomosis.

Conclusion

Although the incidence of colorectal cancer is decreasing in elderly, there is increase in incidence of cases in people younger than 55.There is increase in death rate in same young population probably due to late diagnosis and lack of screening in younger population. To conclude one should not neglect the cases when young population present with symptoms, try to to rule out malignancy in early stage to save the precious life.

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Case Report Article

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Synchrous colorectal cancer: A rare case report

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Abstract

Synchronous colorectal cancer is a rare condition, which presents with the simultaneous development of more than one primary carcinoma and affects different segments of the colon and rectum. The incidence of this disease is about 3.5 per cent of all carcinomas of the colon and rectum and more often affects men. Adenocarcinoma is the most common histological type for synchronous colorectal cancer. We present a rare clinical case of a 51-year-old male with synchronous ascending colon and rectal carcinoma, diagnosed by colonoscopy and underwent successful surgical resection for the same.

Key Words: Colon, Colorectal, Adenocarcinoma, Chemotherapy.

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Introduction

Synchronous colorectal carcinoma refers to more than one primary colorectal carcinoma detected in a single patient at initial presentation. A literature review has shown that the prevalence of the disease is approximately 3.5% of all colorectal carcinomas. Colorectal cancers pose a great challenge for clinical management.Extensive surgery is needed for patients with synchronouscolorectal cancer with known predisposing factorssuch as familial adenomatous polyposis, ulcerativecolitis or HNPCC. For other cases, appropriate surgicalresection with colonoscopic examination for follow-upis recommended. We are reporting a case of synchronous colorectal cancer presenting an ascending colon and rectal cancer. With complete work up and diagnosis, patient was managed successfully by surgical resection.

Case Report

We present a 51-year-old male with no comorbidities presented with complaints altered bowel movements and bleeding per rectum. The patient presented with persistent constipation, continuing for years andon laxatives since long. Laboratory tests after admission showed slightly elevated CEA (17.9U/ml). Abdominal sonographyshowed no pathological findings. Colonoscopy revealed two tumors in the large intestine, the ascending colon and the rectum. Histologically was suggestive of adenocarcinoma. Tumor locations werefurther confirmed by contrast enhanced abdominal computed tomography.

The treatment strategy included surgical treatment, eventually followed by adjuvant chemotherapy. Total Colectomy(total mesocolic excision) with anterior resection and ileo-rectal

anastomosis with diversion ileostomy was performed in compliance with all rules for surgical radicality.

The histopathological examinationrevealed as a moderately differentiated adenocarcinoma in both lesions, non-infiltrating the serosa, including the serosa, with no metastases in the removed 26 regional lymph nodes (pT2N0M0). After discharge, the patient was referred to the department of oncology for adjuvant chemotherapy with leucovorin calcium (folinic acid), 5FU and oxaliplatin (FOLFOX).

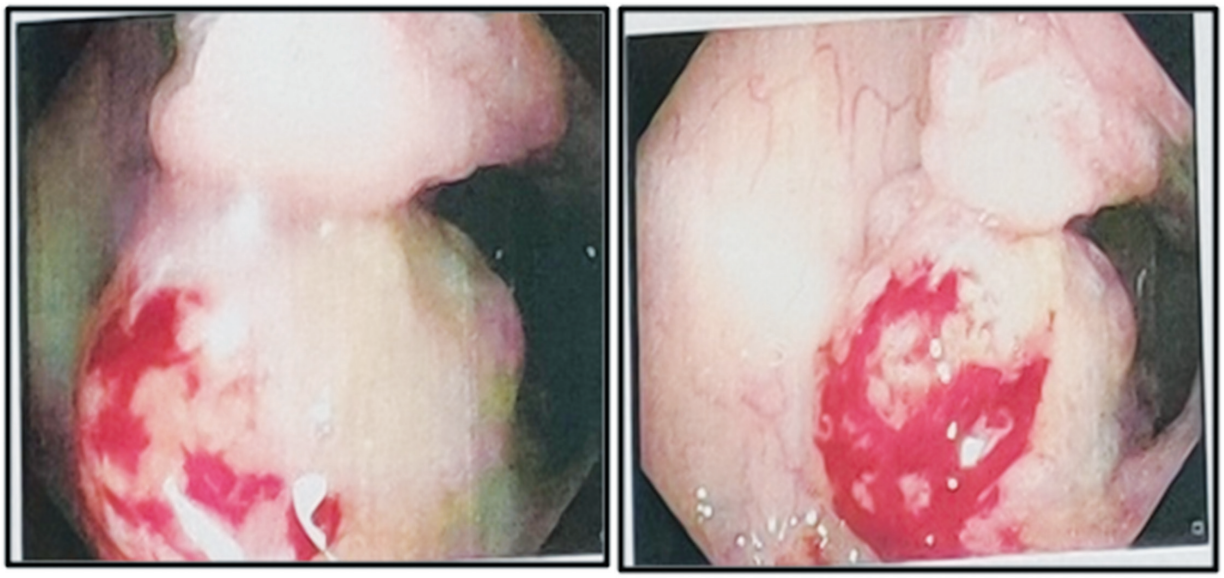

Fig. 1 & 2: Colonscopic image of colonic and rectal tumors

DISCUSSON:

Multiple colorectal carcinoma was first described by VincenzCzerny in 1880.[1]

Synchronous cancers are presence of two or more neoplasms identified simultaneously in the same patient or a second tumor identified up to six months after the initial diagnosis/treatment.

Metachronous tumor is defined as a second primary lesion identified six months after the detection of the first cancer and located no more than 3 cm from the anastomosis. Incidence of synchronous colorectal carcinomas according to the literature is 2 to 9%.[2]

Older male with adenomas of colon are at a particularly high risk of SCRCs and are independent risk factors for SCRCs. Latournerie et al. used advanced statistical approaches, including multivariate logistic regression, to investigate the complex associations of risk factors with SCRC, and found that patients aged 75 years and over were more likely to have SCRCs.[3,4] A study by Fukatsu et al further investigated and found that the lesions of male patients principally occurred in the left colon or bilaterally; however, lesions that occurred exclusively in the right colon did not have gender association. Their analysis indicated that the male gender was a significant risk factor only for those with both tumours located in the left colon[5]. Other known risk factors for SCRC include familial adenomatous polyposis (FAP), hereditary nonpolyposis colorectal cancer (HNPCC), ulcerative colitis and microsatellite instability.[6] Relatives of patients with synchronous or metachronous CRC are at even higher risk of colorectal neoplasia than relatives of patients with solitary CRC. This emphasizes the importance of adherence to surveillance guidelines in high-risk groups[7]. A study by Masatoshi Oya denoted that Synchronous carcinomas were smaller in size and were more frequently found in the left colon than single carcinomas. Also wall penetrations and elevated lesions of synchronous carcinomas were less than those of single carcinomas. Lymphatic invasion was more frequent in index lesions than in concurrent lesions.The index lesions of synchronous carcinomas were similar to single carcinomas in size, differentiation, location and wall penetration. Therefore, the prediction of the presence of synchronouscarcinomas from clinical characteristics or pathological findings is thought

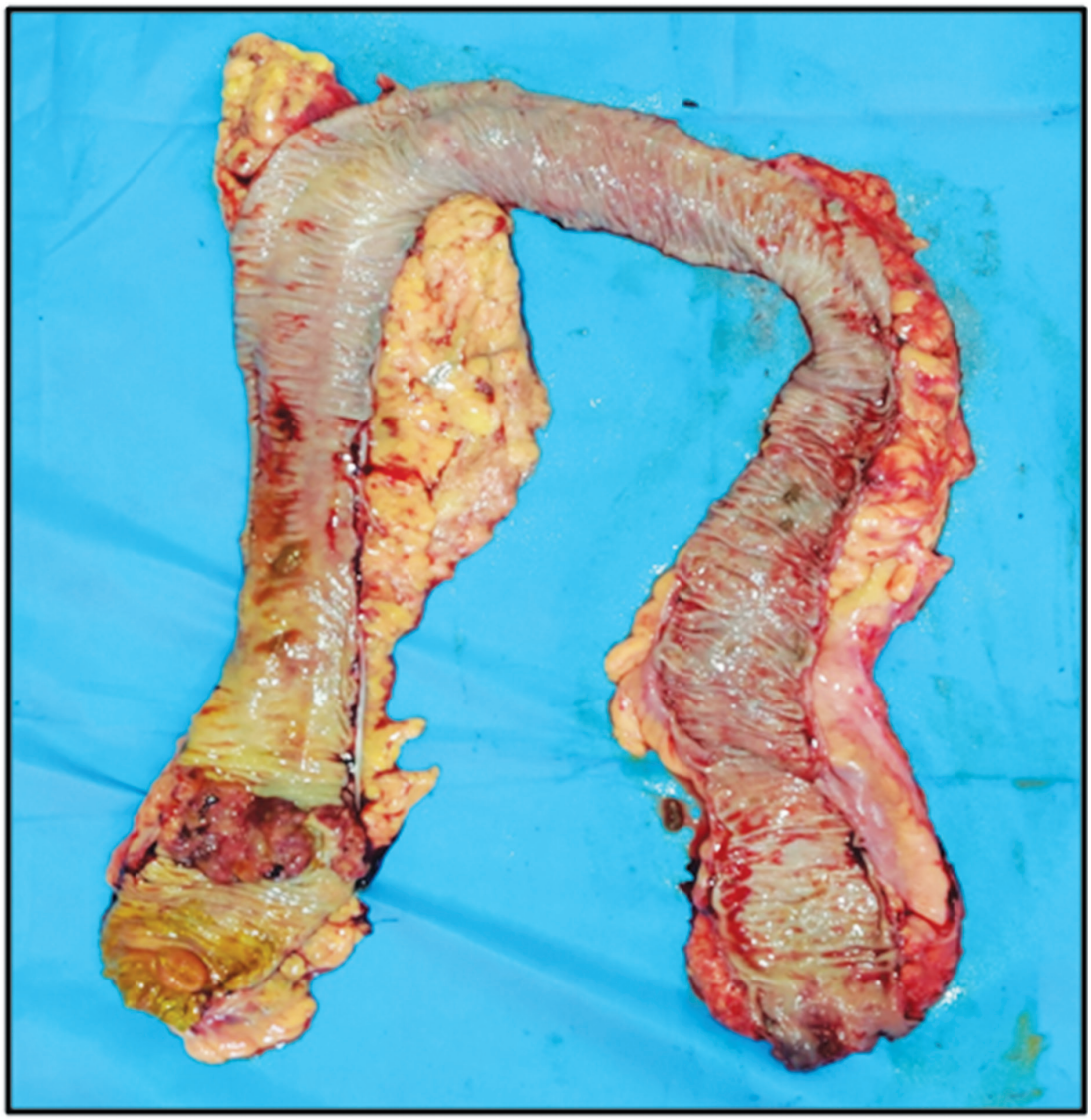

Fig. 3: Excised specimen with tumor seen in the ascending colon and distal rectum.

to be impossible.

Distant metastasis was more frequent in synchronous cases than in single cases. This may be partly due to the relatively frequent venous invasion found in the index lesions of synchronous cases in the present series.[8]

Genetics:

Synchronous lesions within a mainly distinct mutation in the same known CRC genes, although overlaps of few known driver mutations, such as BRAF V600. Highlights heterogeneity in genomic, transcriptomic, microbial and immune CRC biomarkers in syCRC patients, which could have strong implications for therapeutic management, and requires thorough and careful examination. (9)

A study by Wang et al. is the largest sample in which syCRC genomic profiling has been performed on fresh tissue, employed whole-exome capture and next-generation sequencing to obtain complete information in the protein coding sequence of synchronous CRCs from 20 patients. APC, KRAS and TP 53 ranked the top three of the shared mutated cancer genes in synchronous tumours, and they are also frequently mutated in solitary CRCs and demonstrated to drive tumorigenesis by modulating driver pathways that are involved in proliferation, differentiation and apoptosis. At present, no common therapy strategies have been established for syCRCs, and their clinical management is mostly similar to that

of solitary CRC.[10]

In 1975 Heald e Bussey identified all the synchronous colorectal neoplastic lesions (3.5% out of 4884 cases) treated at St. Mark's Hospital in London from 1928 till 1970, showing that 31% of them had been accidentally discovered during intraoperative bowel manipulation while only 15% had already been diagnosed prior to operation (10% by clinical examination, 3% by barium enema, 2% by sigmoidoscopy). Later in seventies the higher employment of preoperative examinations leaded to an increase of synchronous lesions diagnoses. This issue was also stated by Fegiz in 1989 (1.6% of cases diagnosed by double contrast barium enema and 4,1% by colonoscopy).[11]

Diagnosis

Current Recommendations For Screening

FOR AVERAGE RISK PATIENT: FOBT and flexible sigmoidoscopy every 5years, colonoscopy every 10 years, DCBE every 5years. FOR INCREASED RISK PATIENT: With Family history: screening colonoscopy starting at the age 40years or 10 years younger than earliest diagnosis in the family (whichever comes first) and repeated every 5 years. With FAP: flexible sigmoidoscopy to start at ages 10-12 years. Genetic testing, upper GI endoscopy with side viewing scope, should be done every 1-3 years. With HNPCC: colonoscopy every 1-2 years starting at ages 20-25yeras or 10 years younger than earliest diagnosis in the family (whichever comes first).

Personal History

ADENOMATOUS POLYPS: one or more polyp that are malignant or large and sessile-shot follow up; 3 or more polyps – 3 year follow up colonoscopy; 1 or 2 polyps <1cm- follow up 5-year colonoscopy. COLORECTAL CANCER: colonoscopy is incomplete at the time of diagnosis of colorectal cancer due to obstruction – repeat colonoscopy 6month after surgical resection;colonoscopy complete at the time of diagnosis – repeated at 3 years, if normal then every 5 years. IBD- surveillance colonoscopy is recommended. (15devita)

The value of symptoms as predictors of CRC is poor. In a recently published study, the median interval between symptoms and diagnosis was 128 days, because rectal cancer has well defined symptoms, such as rectal bleeding with or without changes in bowel habits, while colon cancer-related symptoms are very vague at the onset, and when the seriousness of symptoms require investigation, the disease is more advanced.[12]

An initial diagnosis of CRC can be made using colonoscopy, with biopsy and histological confirmation. On confirmation of carcinoma, computed tomography (CT) of the chest, abdomen and pelvis is recommended for initial preoperative evaluation, staging and optimal therapeutic planning. The accuracy of CT has been reported to be 67% for T staging, 69% for N staging and 95% for M staging.[13]

Management

Surgery is the cornerstone of treatment. Surgery includes complete mesocolic excision principle i.e, sharp dissection along the embryological planes within the mesofascial interface. extent of lymphadenectomy is still a controversial topic, because no evidence shows the beneficial impact of extensive (D3) versus more limited (D2) dissection on oncological outcome and however it might increase morbidity.Laparoscopy has become the standard technique for colon cancer in many countries worldwide. Surgery for rectal cancer is more complex. Total mesorectal excision is the standard oncological approach to rectal cancer, and extent of resection further depends on involvement of the sphincter complex and other surrounding structures. Colorectal cancer can also present as an emergency with obstruction or perforation. Colonic obstruction can be relieved by a decompressing colostomy.[14]

Adjuvant Therapy fluoropyrimidine-based chemotherapy has shown to improve survival in resected stage III, and in a subset of stage II colon cancers (eg, high-risk T4, poorly differentiated). Several landmark studies, including the MOSAIC study,has showed that the addition of oxaliplatin to a fluoropyrimidine (fluorouracil or capecitabine) as the new standard. For stage II tumours, presence of dMMR is a good prognostic sign and these patients do not benefit from adjuvant therapy.Deciding whether the therapy is going to be curative or palliative is crucial and depends primarily on the tumour burden. Patients might have few (or oligo) metastases that can be respected and rendered cured. A biologic (anti-VEGF or anti-EGFR antibody) is added to the chemotherapy regimen depending on tumour-specific and patient-specific factors.[14]

A complete pre-operative colonoscopy is necessary to perform a diagnostic evaluation of colon and rectum, allowing to detect the presence of synchronous lesions. Colonoscopy cannot be performed in case of obstructive neoplastic lesions or in case of megacolon, a double contrast barium enema or an intraoperative colonoscopy can be performed. Preoperative evaluation is important when a laparoscopic approach is planned, as the bowel cannot be palpated.[11]

The results of the study by wanbin et al, showed a similar short-term outcome of synchronous CRC and solitary CRC patients however, patients with synchronous CRC exhibited worse overall survival, disease free survival, and cancer specific survival than those with solitary CRC.[16]

Conclusion

Appropriate surgicalresection with colonoscopic examination of follow-upis recommended. If one of the synchronous cancers isearly-stage colorectal cancer, colonoscopic resection (endoscopicmucosal resection or endoscopic submucosalresection) may be used. Otherwise, dual colon resectionmay be needed if the synchronous cancers are a large distanceapart and at an advanced stage. Depending on theresources available, life-long clinical follow-up of somepatients with synchronous colorectal carcinoma may berecommended.

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