



## "SURGICAL CONDITIONS OF THE LARGE BOWEL OTHER THAN APPENDIX & HAEMORRHOIDS : A PROSPECTIVE STUDY"

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### KEYWORDS :

#### INTRODUCTION

Putting colonic surgical conditions into historical context requires an understanding of the history of surgery in general. The first accounts of large bowel surgery were often in response to trauma, specifically that of a penetrating injuries.

One of the earliest descriptions of treating an intestinal wound was attributed to Sushruta, a prolific contributor to medicine in East India in the 6th century BC. He stated that if the intestine protruded from the wound, it was to be "examined carefully, washed with milk, and gently replaced in its natural position". If the intestine was perforated, he recommended the application of black ants to close the rent before replacing it back into the abdomen.

Hippocrates, in 4th century BC, considered intestinal wounds to be 'invariably fatal' and this was the western opinion held for several centuries thereafter. In the words of Ruggero de Frugardo: "if a part of the tender intestine is wounded, it is better to leave the treatment to God than man, since death will follow it very soon. (1)

Colorectal cancer is a major cause of morbidity and mortality throughout the world. (2)

It accounts for over 9% of all cancer incidence. (2) (3)

It is the third most common cancer worldwide and the fourth most common cause of death (4)

It affects men and women almost equally, with just over 1 million new cases recorded in 2002, the most recent year for which international estimates are available. (4,5,6,7,8)

#### AIM:

"to Study Surgical Conditions Of The Large Bowel Other Than Appendix & Haemorrhoids": A Prospective Study

#### OBJECTIVES:

1. To study surgical conditions of the large bowel in patient attending surgical department in a tertiary care centre.
2. To evaluate frequency of particular surgical conditions in patients above the age of 18 years.

#### MATERIAL AND METHODS

Present study is an observational prospective study which is non-interventional and descriptive will be carried in Department of Surgery, in a tertiary care hospital, for period of 1 year and 7-month duration.

Patients admitted in various surgical wards of a tertiary health care centre, having large bowel surgical problems, are included in our study by applying the following inclusion and

exclusion criteria.

#### Study Population

It is defined by inclusion and exclusion criteria mentioned below.

There is no control group as it is an observational study.  
Sample size

It's a duration bound study. All patients with inclusion criteria admitted in a tertiary care centre from duration 1st January 2018 to 31st August 2019 are included in this study

#### Inclusion Criteria

1. All patients admitted in surgery department in tertiary care centre with surgical conditions of large bowel other than appendix and haemorrhoids
2. All patients above the age of 18 years.
3. All male and female patients.
4. All patients who have consented for the study.

#### Exclusion Criteria

1. All patients with other surgical conditions other than large bowel, appendix and haemorrhoids.
2. Patients with age less than 18 years.
3. All patients who have not consented for the study.

#### METHODOLOGY

Before enrolling patients for the study, written, informed and valid consent was obtained from all patients admitted in surgery wards in a tertiary care centre in their local vernacular language.

A detailed history of all patients was taken and a thorough clinical examination was done, as a very important step to determine the type of surgical condition of large bowel. All patients were analysed in various aspects like age, sex, risk factors. Patients were also evaluated for other risk factors.

Routine investigations like haemogram, renal function test, liver function test, chest x-ray, abdomen x-ray etc. were done. All the investigations surgical procedures and medical management and investigations will be conducted under direct guidance and supervision of our guide.

Post-operative complications studied in our study were SSI, Post-operative fever, Anastomosis leak and Burst abdomen.

In our study post-operative complications and their effect on patient outcome expressed in the form of death or discharge and days of hospital stay of patients were studied.

In our study we also analysed the rate for complications in emergency and routine procedure, benign and malignant condition.

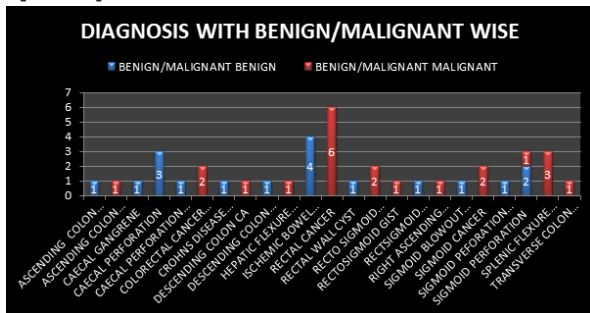
Data is collected from all patients and it is then subjected to statistical analysis with the help of biostatistician

**Statistical Test:** Appropriate statistical tests applied to collected data

**Hypothesis:** Not applicable

**OBSERVATIONS AND RESULTS:**

This study included total 40 patients with large bowel surgical conditions of which 29 (72%) were male and 11 (28%) were female. Maximum patients were of age group 60-70-year group followed by 50 -60-year-old group and least common in age group younger than 30 year of age. Majority of patients had malignant conditions with colon cancer 20 cases (50%) followed by rectal cancer 6 cases (15%) being most common among them. Similarly, in benign conditions Ischaemic bowel disease 4 cases (10%) is the most common condition followed by caeca perforation.



The purpose of this study was to study the clinical profile of these patients in terms of age, sex, chief complaint, physical examination findings, diagnosis, procedures done, wound status, post-operative complications and outcomes of patients in form of death or discharge.

It was an observational prospective study with 40 subjects in a tertiary care centre with various surgical conditions evaluated with different parameters and frequency of different conditions determined with colorectal cancer being with maximum with majority of patients presenting at later stage. Detailed evaluation of patients with surgical conditions of large bowel was carried out.

Males are affected more commonly than females.

Malignant conditions were more common. There were 22 malignant cases and 18 benign cases. Colon cancer was the most common malignant condition. In benign condition ischemic bowel disease followed by caeca perforation are most common condition.

Most common chief complaint was pain in abdomen followed by constipation, most common abdominal examination finding was tenderness and guarding and most common rectal finding collapsed rectum.

Colostomy was the most common procedure performed in malignant cases. Resection and anastomosis for benign cases.

Post-operative complications were surgical site infection, Post-operative fever, anastomosis leak and burst abdomen. Most common post-operative complication was SSI. Out of 40 cases 19 developed surgical site infection, 2 patients developed burst abdomen, 5 patients developed anastomosis leak and 16 patients developed post-operative fever.

47.5 % patients developed surgical site infection with swab culture showing growth of E. coli in majority (37%).

Duration of hospital stay increased in patient of postoperative

complication due to post-operative complications.

Total 12 deaths occurred of which 11 were emergency procedures and one was routine procedure.

In our study Left side colon malignant conditions were more common whereas benign conditions were more common which need further study with larger population.

**CONCLUSION:**

The transition from identification of theoretically avoidable causes of colorectal cancer to implementation of preventive strategies depends on the delineation of exposures considered to be causally associated with development of the disease. From analytical epidemiology, some clear ideas have now emerged about measures for reducing the burden of colorectal cancer. For instance, the risk of colorectal cancer is clearly increased by a western diet. Genes responsible for the most common forms of inherited colorectal cancer have also been identified. Fortunately, the vast majority of cases and deaths from colorectal cancer can be prevented by applying existing knowledge about cancer prevention. Appropriate dietary changes, regular physical activity and maintenance of healthy weight, together with targeted screening programs and early therapeutic intervention could, in time, substantially reduce the mortality and morbidity associated with colorectal cancer

This review summarizes the main perioperative complications of colorectal surgery and modifiable and non-modifiable risk factors which are important to the general surgeon and the relevant specialist as well. In order to minimize or even avoid complications it is crucial to know these risk factors and strategies to prevent, treat or reduce intra and postoperative complications. An increased number of cancer patients every year in India.

Various factors responsible for cancer genesis have been discussed, which need to be controlled for their eradication. India is a growing country playing a crucial role in the development of the whole world, and, hence, needs special attention on this issue. We should create awareness among public about the cancer havoc and its prevention. The different programs should be started by Government and NGOs for creating awareness among Indian public. The diet and living style are important factors to control the spreading of cancers and, hence, Indians should be careful about these facts. Briefly, cancer is disturbing the growing economy of the country, which can be saved by proper handling of this disease. In view of these facts, it is very important to eradicate this havoc. Let us hope for the best future of this country, which is playing an essential role in the development of the whole world.

Alcohol consumption is responsible for the occurrence of colorectal cancer. About 25% population is consuming alcohol in India, which must be minimized or avoided to eradicate this havoc. Government needs to impose a ban on the public sale of alcohol. Seminars and public health camps should be conducted to create awareness of alcoholic harmful effects among Indians.

While focussing on preventive methods we should also focus on providing good imaging facilities so that early diagnosis can be done for improved survival rate

**Summary:**

Detailed evaluation of patients with surgical conditions of large bowel was carried out.

It was an observational prospective study with 41 subjects in a tertiary care centre with various surgical conditions evaluated with different parameters and frequency of different

conditions determined with colorectal cancer being with maximum with majority of patients presenting at later stage. Males are affected more commonly than females. Ratio being 2.73:1 i.e. more than twice.

Most common complain was constipation.

The purpose of this study was to study the clinical profile of these patients in terms of diagnosis, procedures done, sex, wound status, any post-operative complications etc.

Frequency of particular risk factors will help us in taking steps in preventing postoperative complication thus decreasing mortality and morbidity.

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