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Research Article

**SUTDY TO KNOW THE COMPLICATIONS OF COLOSTOMY
AND ITS MORTALITY RATE**¹Dr. Ayesha Zubair, ¹Dr. Ammara Mushtaq, ²Dr. Mishal Nasir¹Punjab Medical College, Faisalabad, ²DG Khan Medical College, DG Khan**Abstract:****Objective:** To evaluate the mortality and morbidity of colostomy in our hospitals.**Study Design:** A prospective Study.**Place and Duration:** In the Surgical Unit I of Allied Hospital Faisalabad for one year duration from June 2017 to June 2018.**Methodology:** Fifty patients who underwent emergency or elective surgery for various abdominal pathologies and resulted in any colostomy were included in the study. A detailed history of each patient was taken and a clinical examination was performed. In addition to initial research, all patients underwent abdominal ultrasound; Barium studies, computed tomography, magnetic resonance and endoscopy were performed in selective cases. Although a decision was taken regarding the colostomy education and quality during surgery, written consent was obtained for possible colostomy training according to hospital protocol, rules and regulations. A special proforma was designed for the study; all findings were entered, compiled and analyzed.**Results:** Of the 50 patients, 38 were male and 12 were female. Male female ratio was 3.17: 1. Most patients had temporary colostomy (74%) and on the left side (70%). The overall morbidity was 24%, stenosis and retraction were common complications. 4% was the overall mortality.**Conclusion:** Colostomy is an important decision associated with significant morbidity and rare mortality. It is mostly required in decompression, drainage, deviation and preservation of anastomosis of colorectal trauma and intestinal obstruction in emergency situations and colorectal neoplasms in elective cases. Infection of the wound, retraction, skin irritation, prolapse and stenosis are common complications; In emergency operations, the rate of complications is higher in children and the elderly.**Key Words:** Colostomy, Complications, Colorectal Trauma, Intestinal Obstruction, Colorectal Carcinoma.**Corresponding author:****Dr. Ayesha Zubair,**
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INTRODUCTION:

The most common intestinal stomas performed is Colostomy. The word stoma is a Greek word which means mouth or opening. Colostomy is an artificial opening that is formed for the drainage of flatus and feces. Decompression, drainage, deviation, externalization and protection of the anastomosis are more common causes for which colostomy formed. Colostomy is performed to maintain a surgical procedure or patient's life in elective or emergency situations. The presence of stoma is considered to be the patient's burden, especially if it is poorly placed or made. An ideal colostomy, seamlessly and with a clear indication or purpose, special informed consent is mandatory. Preoperative consultation and stoma site are important in emergency and elective cases. A colostomy can be permanent or temporary, elective or urgent, no loop or end, sutured or seamless. Loop colostomies are usually performed for situations such as large bowel obstruction in emergencies. On the other hand, the last colostomy is a planned procedure that is usually applied more frequently for rectal carcinoma and is usually permanent. As with all other surgical procedures, colostomy has some complications. These complications may be physical or psychological and early or late. In our configuration, patients usually belong to the lowest socioeconomic class and therefore have a poor nutritional status. They usually occur late and do not have access to adequate medical care. Under these conditions, many complications can be expected. In addition, the lack of stoma therapists and the inability of patients to obtain suitable products for stoma care increase the likelihood of complications. Complications associated with colostomy, closure, and the high cost of applying colostomy to our environment are critical and always present.

MATERIALS AND METHODS:

This prospective Study was held in the Surgical Unit I of Allied Hospital Faisalabad for one year duration from June 2017 to June 2018. Fifty patients who had undergone emergency or elective surgery for various abdominal pathologies and who resulted in any colostomy were selected for the study.

A detailed history of each patient was performed and a clinical examination was performed. In addition to initial research, all patients underwent abdominal ultrasound; Barium studies, computed tomography, magnetic resonance and erythrocyte endoscopy were performed in selective cases.

Although a decision was taken regarding the colostomy education and quality during surgery, written consent was obtained for possible colostomy training according to hospital protocol, rules and regulations. All patients were followed-up for three months on an outpatient basis to detect complications in the colorectal clinic.

Inclusion criteria

- 1) All patients were admitted to the outpatient surgery and emergency department and surgeries that resulted in colostomy were performed.
- 2) Patients older than 12 and in both sexes will be included.
- 3) All patients were taken from external and internal hospitals and needed colostomy.

Exclusion criteria

- 1) All patients under 12 years old were excluded from the study.
- 2) Patients with symptoms of acute confusion or dementia.
- 3) Patients who died within 72 hours of admission. A special proforma was designed for the study; All findings were compiled, analyzed and entered.

RESULTS:

In this study, 38 of the 50 patients who received colostomy education were male and 12 were female and their female to male population was approximately 3: 1. The majorities of patients were in the age range of 31-40 years and performed in emergencies. Therefore, the largest number of temporary colostomies is 74%. Colostomy on the left side was performed on 35 (70%) patients and right side on 15 (30%) patients.

Complication	No.	%
Retraction	3	6
Prolapse	1	2
Necrosis	1	2
Bleeding	--	--
Diarrhoea	2	4
Wound infection	1	2
Stenosis	3	6
Skin excoriation	1	2

The cause of colostomy is colorectal trauma and intestinal obstruction in emergency cases and colorectal neoplasia in elective cases. Complications observed after the formation of colostomy are shown in Table I; Common complications include stenosis, retraction, and diarrhea. The overall complication rate is 28%; this rate is 4% mortality rate and 24% morbidity rate.

DISCUSSION:

Since colostomy was performed successfully in 1776, it has always been associated with a significant complication rate. The morbidity rate in the current series is 24%, it is well supported with 20 to 30% reported in the literature.⁵ The mortality rate directly related to colostomy is around 1%. This study resulted in a mortality of 4%.

The literature often classifies peristomal skin complications by early or late presentations.



Among those, what is described as "skin irritation" has the higher incidence rate.



According to Colwell et al. the incidence rate is between 18% and 55%.

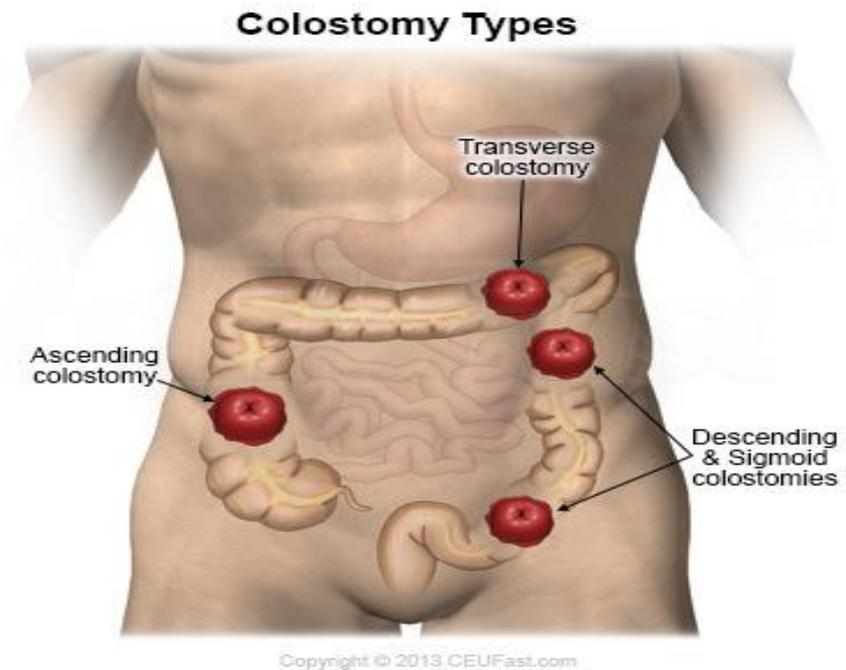


Most of the complications after colostomy are related to region and type, size of abdominal wall opening and control of infection. The most common

complications observed in our study were retraction and stoma stenosis, followed by skin irritation, pruritus, infection, and prolapse (Table I). The main

causes of these complications were lack of active nursing care and illiteracy of patients' stomata. In emergency cases, the complication rate was higher in

elective cases than in adults in the elderly and children, and was higher in the last colostomy than in loop colostomy.



The importance of an experienced stoma therapist should also be emphasized. They can provide valuable assistance before and after stoma formation. Proper counseling and written consent play a very important role. Most of the cases in our stoma population belong to the poor class. The only way to benefit them is to direct them to associations of stoma clinics or colostomy. Stoma care clinics are located in the major cities of Pakistan such as Karachi, Lahore and Islamabad. Colostomy associations are available throughout the world and can be contacted via the Internet. Despite all the advances in the modern management of patients, colostomy remains an inevitable procedure for our structuring. This is because the patient is not at an affordable price; there is no experience in basic and rural health centers, the presence of infection or contamination, and a late presentation.

CONCLUSION:

Colostomy is the most common intestinal stoma. The most common indications for stoma formation are drainage, decompression, protection and deviation of the anastomosis. Main etiological factors include bowel obstruction, colon carcinoma and colorectal trauma. Colostomy is an important decision because it is associated with significant morbidity and rare mortality. There are well-known complications related to colostomy formation such as skin irritation,

wound infection, stenosis and retraction. The complication rate of colostomy is higher among emergency patients and children and elderly patients.

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