

**Iliostomy and Mucous fistula with and without
posterior wall anastomosis after right
hemicolectomy: A comparative study of short
term outcomes**

Thesis

Submitted for partial Fulfillment of Master Degree
in General Surgery

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2018

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

سببنا انك لا تعلم لنا
إلا ما علمتنا إنك أنت
العليم العظيم

صدق الله العظيم

سورة البقرة الآية: ٣٢



Acknowledgement

*First and for most, I feel indebted to **ALLAH**, most graceful, who gave me the strength to complete this work.*

*I would like to express my profound gratitude to **Prof. Dr. Tarek Youssef Ahmed**, Assistant Professor of General Surgery, Faculty of Medicine – Ain Shams University, for his great support, meticulous revision and guidance I really have the honor to complete this work under his supervision.*

*I am particularly grateful to **Dr. Mahmoud Ahmed Farghaly**, Lecturer of General Surgery, Faculty of Medicine – Ain Shams University, whose encouragement, guidance and support from the initial to the final level enabled me to develop and understanding of the subject.*

*Also, I would like to express my deep thanks and gratitude to all members in my **family**, specially my **Parents**, for supporting and understanding me all the time.*

Last but not least, I'm grateful to all of my teachers, educators and colleagues who took from their time to teach me, support me or even give a small advice that helped me to make a step forward in my career.

 **Sara Gomaa Syam**

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List of Abbreviations

<i>Abbrev.</i>	<i>Full term</i>
BMI	: Body Mass Index
CBC	: Complete Blood Count
Cm	: Centimeter
CT scan	: Computed tomography scan
CXR	: Chest X-ray
DM	: Diabetes mellitus
HTN	: Hypertension
I.O	: Intestinal obstruction
LCF	: Liver cell failure
Lt	: Left
Mm	: Millimeter
MRI	: Magnetic Resonance Imaging
N	: Number
Post	: Posterior
P-value	: Probability value
RF	: Renal failure
Rt	: Right
SD	: Standard deviation
SPSS	: Statistical package for social sciences
T.B	: Tuberculosis
TPN	: Total parenteral nutrition
Wks	: Weeks

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Abstract

Background: Intestinal anastomoses in colorectal surgery are at risk of severe intra-abdominal septic complications as dehiscence, abscess or fistula, which are associated with mortality. It is important to do the safest possible surgery and minimize the risk for surgical complications in patient with risk factors. **Aim of the Work:** The purpose of the study is to do a comparative study of short term outcomes of ileostomy and mucus fistula with and without posterior wall anastomosis. **Patients and Methods:** This retrospective study was conducted on 50 patients presenting with surgical abdomen to the emergency department of Ain Shams University Hospitals – Cairo. Data were retrieved from data system of patients at Ain Shams University Surgery Hospital, at the period January 2016 to January 2018. **Results:** The current study revealed a statistically significant difference between with and without Posterior wall anastomosis according to hospital stay (2nd operation). There was also a statistically significant difference between with and without Posterior wall anastomosis according to wound infection in complications (2nd operation post closure). **Conclusion:** valuable short term advantage of stoma with posterior wall anastomosis is the short hospital stay and the less need for parenteral analgesia. This improves rates of patients getting back to their normal activity postoperatively.

Key words: Iliostomy, mucous fistula, posterior wall anastomosis, right hemicolectomy

Introduction

In a Greek Word, Stoma means ‘mouth opening’, while as a medical term it means exteriorization of bowel on skin for faecal or urinary diversion (**Kirkwood, 2005**).

There are three main types of stoma: Colostomy, ileostomy, urostomy and it may be temporary or permanent (**Brand et al., 2008**).

Intestinal anastomoses in colorectal surgery are at risk of severe intra-abdominal septic complications as dehiscence, abscess or fistula, which are associated with mortality (**Golub et al., 1997**).

It is important to do the safest possible surgery and minimize the risk for surgical complications in patient with risk factors (**Myrelid et al., 2012**).

Major indications for ileostomy include diffused bowel injury, that prevent primary anastomosis like longstanding peritonitis, intestinal obstruction, radiation enteritis, ischemia, inflammatory bowel diseases, tubercular and enteric colitis (**Brand et al., 2008**).

In severely ill patients the aim is only to deviate the faecal stream followed by delayed resection and anastomosis (**Myrelid et al., 2012**).

An alternative in such a complex situation might be a split stoma with excision of the disease followed by an anastomosis at some point in the future (**Lange et al., 2006**).

Split stomas are created when both ends of the bowel are brought to the skin surface, but at different incision sites. It could be following a subtotal colectomy or right hemicolectomy, in which the ileum is formed into an ileostomy and the rectum or the colon into a mucous fistula and it is usually temporary in nature (**Brand et al., 2008**).

Anastomotic leakage following right colectomy for malignancy is a rare complication associated with high mortality and morbidity (**Veyrie et al., 2007**).

The therapeutic dilemma is between the construction of an ileostomy and mucous fistula and the construction of a new ileo-colic anastomosis that have significant disadvantages, i.e., the need for a new laparotomy, quality of life issues and the danger of a new leakage can arise the latter (**Taflampas et al., 2011**).

An alternative approach can be done in such cases, which is the construction of a side-to side ileocolic anastomosis which is then brought out in the right abdominal wall as a stoma, so that reconstruction can be done without midline laparotomy (**Taflampas et al., 2011**).

Here, in our study we did a short term comparison between two groups of patients underwent ileostomy with mucous fistula.

The first underwent posterior wall anastomosis and the second without.