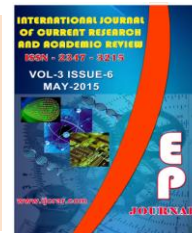




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A clinical study on intestinal stomas at a tertiary care hospital, Karnataka, India

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A B S T R A C T

Intestinal stoma is a very commonly performed procedure with a high rate of complications. This study was undertaken to study the various types of complications in different types of intestinal stomas and their management. This was a prospective study involving 40 patients underwent stoma formation and its complications at Victoria hospital attached to Bangalore Medical College and Research Institute, Bangalore during October 2010 to September 2012. Both elective and emergency procedures were included in the study. Data was collected by following up the patient postoperatively either by phone or in person. A total of 40 patients were included in the study. Total of 12 patients underwent colostomy formation, of which 8 were loop colostomy and 4 were end colostomy. 27 patients underwent ileostomy formation, of which 25 were loop ileostomy and 2 were end ileostomy. Stoma formation is associated with a high rate of complication.

Introduction

The word "Stoma" comes from the greek word meaning mouth or opening. An intestinal stoma is an opening of the intestinal or urinary tract onto the abdominal wall, constructed surgically or appearing inadvertently. The types of intestinal stomas are colostomy, ileostomy, jejunostomy and caecostomy. An ileostomy involves exteriorization of the ileum on the abdominal skin¹.

In rare instances, the proximal small bowel

may be exteriorized as a jejunostomy. A colostomy is a connection of the colon to the skin of the abdominal wall. A urinary conduit involves a stoma on the abdominal wall that serves to convey urine to an appliance placed on the skin. The conduit usually consists of an intestinal segment, or in some cases a direct implantation of the ureter, or even the bladder, on the abdominal wall².

Information about the types and number of

stomas constructed, complication of stomas and resultant impairment of an individual's life has been limited because of the diseases for which the stomas are constructed are not mandated as reportable in India.

Surgical patients frequently need some type of intestinal stomas for a wide spectrum of disorders such as penetrating abdominal trauma, colorectal carcinoma, enteric perforation & bowel gangrene. The complications associated with intestinal stomas are skin excoriation, edema of spout, prolapse, retraction, stenosis, necrosis/gangrene, bleeding, perforation and parastomal hernia³.

There are many indications for which stomas (both ileostomy and colostomy) are constructed. Some for example being decompressing colostomy-constructed most often for distal obstructing lesions causing massive dilatation of the proximal colon without ischaemic necrosis. Diverting colostomy providing diversion of intestinal contents because the distal segment of the bowel has been completely resected as a part of abdomino-perineal resection done for carcinoma of rectum, because of known or suspected perforation or obstruction of the distal bowel⁴.

The history of stomas has its beginnings in biblical times, but the first purposeful creation of a stoma occurred slightly more than 200 years ago.

In a relatively short time, thanks to many of the great pioneers in surgery and enterostomal therapy, the stoma has evolved from a hastily constructed, foul-smelling, and unsightly artificial anus covered with only moss and leaves and held in place with a crude leather strap to an odorless, barely noticeable, and often continent opening that may require no device whatsoever⁵.

Materials and Methods

This is a prospective study on 40 patients undergoing intestinal stoma construction at Victoria Hospital, Bangalore Medical College and Research Institute as an elective procedure or as an emergency procedure. Data were collected from patient records maintained prospectively, supported by information from operation notes and patient case records.

Follow up of the patient was also done by patient interview in person or over the phone at 4, 8, 12, 14, 28 wks.

Inclusion criteria

1. All patients male and female above the age of 18 years.
2. All emergency and elective cases undergoing intestinal stoma construction.

Exclusion criteria

1. Patients undergoing urinary stoma construction.

Patients undergoing stoma construction as indication for gynaecological disorders

Results and Discussion

A total of 40 patients were included in the study. The maximum number of patients were in the age group of 40 -50 years. (n=10).

The most common stoma constructed was ileostomy (27 out of 40), with loop ileostomy being the most common type of ileostomy being performed (25 out of 27 ileostomies), endileostomy was done in 2 patients. Colostomy was constructed in 12 patients, out of which 4 were end colostomies and 8 were loop colostomy.

Table.1 Sex distribution of patients studied

Sex	Frequency	Percentage
Female	10	25
Male	30	75

Table.2 Indication for surgery

Indication	Frequency	Percentage
Malignancy	14	35%
Perforation	12	30%
Ibd	5	12.5%
Abdominal trauma	2	5%
Bowel gangrene Strangulated	2	5%
Inguinal hernia	2	5%
Tb abdomen	2	5%

Undergoing stoma construction, the main indication was colorectal malignancy, followed by bowel perforation.

Table.3 Types of stoma that were constructed

Procedures	Numbers	Percentage
Colostomy	12	30%
Loop colostomy	8 out of 12	66.66
End colostomy	4 out of 12	33.33
Ileostomy	27	67.5%
Loop ileostomy	25 out of 27	92.5
End ileostomy	2 out of 27	7.5
Jejunostomy	1	2.5

Stomas cause undesirable complications. Complications of stoma creation include physiologic problems, functional problems, and challenges with psychologic adjustment or adaptation. Physiologic problems such as

parastomal hernias and skin irritation are most often described in the medical and nursing literature. A total of 40 patients were included in the study who underwent stoma formation at this hospital from October 2010

to September 2012. The study include both emergency and elective stoma formation.

- Total of 12 patients underwent colostomy formation, of which 8 were loop colostomy and 4 were end colostomy
- 27 patients underwent ileostomy formation , of which 25 were loop ileostomy and 2 were end ileostomy.

The most common indication for stoma formation was malignancy (n=14) followed by Bowel perforation(n=12).

Conclusion

Stoma formation occurred mostly in the patients between 40-50 years age and the most common indication for stoma formation was malignancy.

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