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Surgery

Early Closure of Loop Ileostomy: Is It Safe and Advisable?

Dr. Sudhansu Kumar Jain*
Assistant Professor, Dept .of Surgery, P.M.C.H, Patna, India

Original Research Article

***Corresponding author**
Dr. Sudhansu Kumar Jain

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Abstract: A total of 36 patients of temporary loop ileostomy were treated with early closure at 4 to 6 weeks from its construction. It was found to be safe and advisable especially on select group of patients with low rate of complications and the results can be compared to classical delayed closure.
Keywords: Ileostomy, closure, loop, stoma.

INTRODUCTION

Loop ileostomies may be lifesaving in many situations but at the same time it poses significant inconvenience to the patient. It adversely affects the daily routine, life style and even sexuality. Early reversal of the stoma is, therefore, most desirable to the patient.

The time for reversal of stoma is also of utmost importance. Oedema and friability of tissues, in addition to the precipitating cause for the construction of ileostomy, precludes early closure. Most of the surgeons prefer to close loop ileostomy after a gap of 12 weeks. This results into significant psychological and socio-economic strains to the patient.

The present study has, therefore, been undertaken to evaluate the outcome of early reversal of loop ileostomy.

MATERIALS AND METHODS

This is a prospective study carried over the patients of loop ileostomy attending surgical OPD of Patna Medical College and Hospital, Patna from July 2016 to June 2017[5]. All the patients desirous of early closure were investigated and selected for early closure at 4 to 6 weeks as per the inclusion criteria:

- Patients with Haemoglobin level above 10 gm %
- Patients with serum albumin above 2.5 gm%, and
- Absence of active infection

If needed preoperative blood transfusion were given to raise Hb level above 10gm%. All the selected patients were subjected to distal loopogram to ensure distal patency. Patients with complication with stomas and those with multiple stomas were excluded from this study. After proper preoperative work up and preparation on usual ways all the patients were operated under general anaesthesia and intestinal continuity restored with the help of linear staplers. In all the patients abdominal drain was given and post-operative course was closely followed up with special reference to complications and return of bowel activity.

OBSERVATIONS AND RESULTS

A total of 36 patients underwent early closure at 4-6 weeks from the construction of ileostomy. Most of the patients in this study were young with mean age of 22 years (12-38 years) with male predominance (M: F ratio of 3.7:1).Precipitating cause of ileostomy was enteric perforation in 14 patients(38.9%); blunt abdominal trauma in 9 patients (25%); abdominal tuberculosis in 5 patients(13.9%); penetrating abdominal injuries in 4 patients(11.1%); appendicular perforation in 2 patients(5.6%) and refunctioning ileostomy to protect distal colonic anastomosis in 2 patients(5.6%). 10 of the patients (27.8%) had preoperative mild to moderate degree of excoriation of the skin. Patients with significant complications had not been included in this study.

As far as early post-operative complications were concerned wound infection was seen in 14 patients (38. 9%). Return of bowel sounds were observed by 3-5 post-operative days in most of the patients.1 patient (2.8%) developed prolonged ileus which resolved by 8 th post-operative day on conservative therapy. 2 of the patients developed minor enter cutaneous fistula which healed on conservative treatment by 12 and 15 postoperative days. None of the patients developed intra

peritoneal collection or significant anastomotic leak requiring laparotomy.

DISCUSSION

Most of the surgeons prefer to undertake loop ileostomy closure after 8 – 12 weeks. During this waiting period stoma related complications can occur and on the other hand it adversely affects the life style of the patient. It also imparts social and economic strains to the patient. They need training in stoma care and may need multiple hospitalisation and visit to general practitioners.

In the present study only those patients were included who were in good physical condition without any features of active infection and organ failure. They also did not exhibit radiological signs of leakage of anastomosis verified by aqueous contrast studies. The similar inclusion criterias were also laid down by Alves *et al*. [1]; Jordi *et al*., [2] and Nadim *et al*. [3]. Majority of the patients under study had undergone construction of loop ileostomy because of infective reasons (52.7%) or for trauma (25%).This was in sharp contrast to western world where refunctioning loop ileostomies were made to protect distal colorectal anastomosis. In the present study wound infection (38.9%) was found to be most common complication. Nadim *et al.* [3] also found complications like ileus, sepsis and abscesses to be most frequent. Nadim *et al*. [3] found an anastomotic leak rate of 5.7% and a mortality rate of 1.2% whereas Samivillah *et al*. [4] found a leak rate of 4.5% and a mortality rate of 2.2%. In the present study there was no frank anastomotic leak or mortality which may be attributed to strict adherence to inclusion criteria. In the present study there was one case of enter cutaneous fistula (2.7%) which, however, healed on conservative means.

The present study has focussed primarily on early closure of loop ileostomy and the results obtained were comparable to other studies. Early closure atleast, if done, on selected group of patients may have an outcome comparable to that of classical delayed closure.

CONCLUSION

Early closure of loop ileostomy after 4 to 6 weeks of its construction can be safely undertaken on select group of patients without having adverse effects over functional results. However, before embarking on early closure it must be ensured that the patient is in good physical condition and free of active infection.

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