EMERGENCY TREATMENT OF OBSTRUCTING LARGE BOWEL CANCER

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ABSTRACT

Thirty cases of obstructing large bowel cancer were treated by emergency procedures like proximal colostomy (55%), caecostomy (3%), appendicostomy (2%), ileotransverse colostomy (6%), right hemicolectomy (14%), anterior resection (14%), Hartmann's procedure (3%) and Lahey's procedure (3%). Primary resection for tumours of the right colon and staged procedures for tumours of the left colon and rectum and are safe procedures in the management of obstructing large bowel cancer.

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KEY WORDS : Colonic neoplasms; Intestinal obstruction; Operative surgery.

Introduction

Almost 75 percent of large bowel obstruction is caused by colorectal cancer. Twenty five percent of large bowel obstructions present as acute obstruction necessitating emergency surgical intervention on an unprepared large bowel [1]. Traditionally malignant obstruction of the colon is treated by staged operative procedures. However, with the advent of newer antibiotics and facilities for life support measures, primary resection of obstructing malignant lesions is gaining wide acceptance. This policy of treatment is reported to result in less morbidity and mortality but not longer survivals [2,3].

In view of the changing trends in the emergency management of large bowel obstruction by malignant lesions, the present retrospective study was done which highlights a safe approach to the problem.

Materials and Methods

Between Feb 1982 and Jun 1993, 30 patients were operated for obstructing large bowel cancer. Patients with uncertain diagnoses, insufficient data or those who were not submitted to emergency surgery were excluded from this study. All of them presented

with features of acute intestinal obstruction necessitating emergency laparotomy. Suitable preoperative preparation was done in all cases.

Results

There were 22 male and 8 female patients. The mean age was 49 years. Laparotomy revealed malignant lesions of sigmoid colon (40%), recto-sigmoid (10%), splenic flexure (15%), descending colon (20%), right colon (10%) and transverse colon (5%).

The emergency surgical procedures included decompression by proximal colostomy alone (55%), caecostomy (3%), transileal diversion by appendicostomy (2%), bypass by ileotransverse colostomy (6%), extended right hemicolectomy (14%), both high and low anterior resection (14%), and Hartmann's and Lahey's procedure in 3% each.

Following emergency colostomy and bypass (22 cases), definitive resective procedures were carried out within 2-3 weeks of preparation. The procedures included resection and stapler anastomosis, right hemicolectomy, abdomino-perineal resection and left lobe hepatectomy.

There was no operative mortality. Patients

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undergoing proximal colostomy and then the definitive resection fared well since toxæmia due to obstruction was controlled, the colon assumed its normal calibre and patient's nutritional status improved.

A better nodal clearance including metastectomy (hepatic lobectomy) was feasible only because of the staged procedure, overall morbidity was minimal. Two patients who underwent Hartmann's and Lahey's procedures could not be taken up for definitive resection due to advanced lesions.

Discussion

Emergency surgery for obstructing large bowel cancer has undergone a rational change in the strategy for treatment. Primary resection was the best form of therapy but it carried a very high mortality and morbidity. Therefore, staged operative procedures were introduced. It is well established that a colon anastomosis should be made only if the proper local conditions are met viz. a good blood supply, no tension, no local sepsis and no faecal contamination. Since, in obstructing colon cancers, it is not possible to perform a pre-operative preparation, an ideal anastomosis is not always feasible.

Some authors [4] reported good results with a different approach like sub-total colectomy with ileo-rectal anastomosis in which all the faecal contents are removed with the excised colon. This technique, according to the authors, has been surprisingly well tolerated by old and debilitated patients. Thus the colon occluded with the malignant lesion can be treated by one operation.

Primary resection and ileo-rectal anastomosis is feasible in patients with competent ileo-caecal valves because the removal of the obstructed segment provides approximately equalized bowel ends for easier ileo-rectal anastomosis [5].

In our practice, primary resection is not a suitable procedure because most of the patients report late for treatment. Chronic intestinal obstruction takes time to present as acute obstruction. The colon is generally mas-

sively dilated, oedematous, ulcerated, and at times with impending perforations. In addition to the dilated colon, ascites, visceral spread, and regional lymph node involvement impose limitations on a meticulous, complete loco-regional control of the disease during an emergency procedure. Therefore, embarking on a definite resective procedure on an unprepared colon, in a patient whose general condition is poor, can be hazardous. Following Hartmann's procedure, early colorectal anastomosis is easier and safer [6]. However, with the use of newer antibiotics and advancement in the advance life support measures, primary resection of malignant obstruction of the large bowel has been gaining favour again. The operative procedure has less morbidity and mortality but over all survival is not improved [3].

In order to reduce morbidity due to emergency primary resection, intraoperative large bowel "wash-out" was used by a number of workers [7,8]. The technique consists of the introduction of a Foley's catheter into the caecum through a small stab terminal ileotomy and then through the ileo-caecal valve. The next step is to select the proximal level of colon division. Then the "wash-out" proceeds until the water becomes clear while the colon resection is carried out. An average of 16 litres of saline solution is used. Therefore, two options are available for the management of left-sided malignancy. Primary anastomosis following intra-operative colonic "wash-out" is advocated by Dorudi et al [9]. On the other hand, Stephenson et al and other authors have advocated subtotal colectomy and primary ileo-rectal anastomosis without the need of intra operative "wash-out" [10,11].

Therefore, the surgical options for obstructing large bowel cancer are primary resection and ileo-colic anastomosis on the right colon in favourable conditions, bypass procedure and proximal colostomy and subsequent definitive procedure.

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