PALLIATIVE SURGERY FOR INTESTINAL OBSTRUCTION DUE TO RECURRENT OVARIAN CANCER

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Background: Intestinal Obstruction is a frequent complication after operation for Ovarian Cancer. This study was done to see the outcome of palliative surgery for Intestinal Obstruction due to recurrent ovarian Cancer. **Methods:** We retrospectively evaluated the records of all the patients who presented with intestinal obstruction after operations for Ovarian Cancer in all the three Surgical Units of Ayub Teaching Hospital Abbottabad from March 1998 to April, 2009. Demographic data, type of management, morbidity, mortality, hospital stay, surgical procedure, symptomatic relief, return of bowel function and outcome were analyzed. **Results:** There were 56 patients with symptoms of partial or complete intestinal obstruction. Conservative treatment was successful in 22 (39%) patients. Laparotomy was done in 30 (53.5%) patients. The cause of intestinal obstruction was adhesions 8 (26.6%), local recurrence 10 (33.3%) and diffuse carcinomatosis in 12 (40%) patients. Palliative surgery was done in 20 (66.6%) patients while 8 (26.6%) had adhesionolysis only. 9 (30%) patients had resection and anastomosis, 7 (23.3%) had bypass surgery, 3 (10%) had colostomy and one (3%) had Hartmann procedure. Postoperative complications occurred in 26 (86.6%) patients. 12 (40 %) patients died after surgery. Mean hospital stay was 18 (9–42) days. Palliative surgery was successful in 8 (26.65%). **Conclusion**s: Majority of patients with Intestinal obstruction after operation for Ovarian Cancer can be managed conservatively. Palliative surgery is associated with high mortality and morbidity but it should be done in patients not responding to conservative measures.

Keywords: Ovarian cancer, Intestinal Obstruction, Laparotomy

INTRODUCTION

Intestinal obstruction is the most common complication in patients with Ovarian Cancer.[1,2] This may be due postoperative adhesions, focal malignant deposits or diffuse carcinomatosis.[3] Many patients are unfit for surgery due to extensive local disease or poor general condition.[2,3,4] It is commonly assumed that obstruction is due to advanced malignancy and death is inevitable. Studies have shown that palliative surgery for intestinal obstruction in recurrent ovarian cancer may be beneficial in terms of survival.[4,5]

This study was done to see morbidity, mortality, site of obstruction, surgical procedure and benefits of palliative surgery of patients who presented with intestinal obstruction after operation for Ovarian Cancer.

MATERIAL AND METHODS

This is a retrospective case series of thirty patients who had Laparotomy for intestinal obstruction after operation for ovarian cancer. The record of all the patients admitted in all the three surgical units of Ayub Teaching Hospital from March 1998 to April 2008 with a diagnosis of Intestinal obstruction were reviewed. Patients with Intestinal Obstruction after operation for Ovarian Cancer were selected for this prospective case series. Data recorded included age, length of hospital stay, radiology notes (X-rays, CT scans, Ultrasound), pathology reports, operative findings, morbidity and mortality. Mortality was defined as death within 30 days of operation or during hospital stay. Morbidity included all complications. Successful palliation was defined as symptomatic relief and return of bowel functions. All patients were initially treated conservatively by Nasogastric aspiration, IV fluids, Nil per oral, antispasmodics. Abdominal X-rays and ultrasound were done in all patients. Trial of conservative treatment was considered successful if there was clinical and radiological evidence of resolution of obstruction. Laparotomy was done if obstruction was not relieved by conservative treatment.

RESULTS

From March 1998 to April 2009, 56 patients were admitted with partial or complete intestinal obstruction following operation for Ovarian Cancer. Conservative treatment was successful in 22 patients while 30 patients had laparotomy because intestinal obstruction did not relieve by conservative measures. In 4 patients laparotomy was not done due to uncontrolled ascites and cachexia. 30 patients who had Laparotomy form the study group.

The cause of intestinal obstruction was Local Recurrence 10 (33.3%), Diffuse Peritoneal Metastasis 12 (40%), and adhesions in 8 (26.5%) Table-1. The site of obstruction was Small bowel in 21 (70%), large bowel in 5 (16.6%) and both small and large bowel in 4 (13.3%). Palliative surgery was done in 20 (66.6%) patients while 8 (26.5%) had lysis of adhesions.. The operative procedure is shown in Table-2. Resection and anastomosis was done in 9 (30%) patients, Bypass procedure in 7 (23%) patients, colostomy in 3 (10%) patient, Hartmann procedure in 1 (3.3%) patient, Adhesionolysis in 8 (26.6%). In 2 (6.6%) patients, no

palliative surgery was possible due to advanced abdominal metastatic disease.

Mean hospital stay for patients who had laparotomy was 18 (9–42) days. Complications occurred in 26 (86.6%) patients (Table-3). Postoperative mortality was 12 (40%) patients. There was no mortality in patients who had adhesionolysis. Palliative surgery was successful in 8 (26.5%) patients. Sixteen (53%) patients were discharged for home. Mean survival time after operation was 4.2 (2–6) months.

Table -1: Case of intestinal obstruction (n=30)

Cause of intestinal obstruction	Number	Percentage
Local recurrence	10	33.3
Diffuse peritoneal metastasis	12	40.0
Adhesions	8	26.5

Table -2: Operative procedure (n=30)

Operation	Number	Percentage
Resection & anastomosis	9	30.0
Bypass surgery	7	23.3
Colostomy	3	10.0
Hartmann procedure	1	3.3
Adhesionolysis	8	26.6
No surgical procedure	2	6.6

Table-3: Complications (n=26)

Complications	Number	Percentage
Wound infection	20	77.0
UTI	6	23.0
Intra-abdominal abscess	4	15.0
Burst abdomen	2	7.6
Entero-cutaneous fistula	2	7.6
Pneumonia	2	7.6
DVT	2	7.6

DISCUSSION

The principal aim in management of terminal cancer is to relieve the symptoms so that they may return home to their families for as long as possible. Initial management of Intestinal Obstruction after operation for Ovarian cancer is conservative including Nil per oral, nasogastric decompression and i.v. fluids and a combination of drugs to control colics, abdominal pain, nausea and vomiting. Surgical intervention is recommended when sympotomatic relief cannot be obtained with conservative management. However surgery is associated with increased morbidity and mortality particularly in malnourished patients, elderly patients and patients with advanced intra-abdominal cancer.

Peritoneal metastasis was the most common cause of Intestinal Obstruction in this study. This is comparable with other studies.[1–4] However it has been shown that in about one third of patients with previous cancer, the obstruction is caused by benign disease. A review of 92 patients with previous gynaecological cancer who presented with obstruction showed that 31 (34%) had benign disease.[4] In this study 21 (70%) had small intestinal and 5 (16.6%) had large bowel obstruction. This is comparable to other studies.[1,4]

Complications occurred in 86.6% patients in this study. Previous authors have reported complication rate of less than 40%.[1–4] Mortality was 40% in this study. This is higher than other studies.[1,2,5,6]

No patient in this study had repeat surgery for recurrent intestinal obstruction. Studies have shown that repeat surgery for recurrent bowel obstruction in advanced ovarian cancer may achieve successful palliation in few cases and is associated with high morbidity and mortality.[7,8] In these patients non-surgical approaches based on pharmacological treatment offers good control of pain, colic and vomiting. If these fail, endoscopic stent placement and percutaneous venting gastrostomy should be considered a better alternative to nasogastric intubation.

We conclude from this study that palliative surgery is recommended for relief of intestinal obstruction due to ovarian cancer when symptoms cannot be controlled with conservative measures. The palliative surgery for relief of intestinal obstruction is associated with high morbidity and mortality. However it allowed some patients who would have died in hospital to return home and contributed in many to the improvement in quality of life.

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