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Palliative surgery in management of advanced carcinoma stomach and its outcome

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ABSTRACT

Background: Gastric cancer is the second leading cause of death from malignant disease World-wide and most frequently discovered in advanced stages. The incidence of gastric cancer in India is low compared to developed countries. But in India southern and northeast area more number of cases was diagnosed. More cases of cancer stomach are diagnosed in the early stages in Japan due to effective screening programme. Lack of such screening programme, ignorance about the disease and lack of awareness of warning signs of cancer lead to the detection of many cases in the advanced stage of gastric cancer. Where palliation is the mainstay of treatment. We discussed the different methods of palliative surgery and its outcome in this paper.

Methods: This is a prospective study over 5 years February 2011 - 2016 January including 6 months follow up. 104 advanced carcinoma stomach patients were included in this study. To evaluate role of palliative surgery in advanced gastric cancer we analyse the data in the basis of presentation of disease, sex distribution, type of palliative surgery, relive of symptoms, preventions of complications, post-operative mortality morbidity, and overall survival.

Results: In our study mean age of presentation is 58 years. Most common affected are male. Stage III disease are more common. Immediate post-operative mortality is 4 patients 7.14% comparable to the non-resection group 1 patients (2.63%). Symptoms relived 46 patients in resection group (82.14%), in non-resection group it is 16 (42.1%). Overall survival is (6 moths - 1 years) 19 (33.9%) patients, and in non-resection group it is only 2 (5.26%) patients. Median survival rate is 10 months.

Conclusions: Palliative resection should be carried out for betterment of quality of life where it is possible. Relief from symptoms and complications can be achieved by resection of tumour mass in advanced carcinoma stomach.

Keywords: Advanced carcinoma stomach, Outcome of palliative surgery, Palliative surgery

INTRODUCTION

Gastric cancer is the second leading cause of death from malignant disease worldwide.¹ A high incidence of gastric cancer has been reported from Southeast Asia, most commonly from Japan, China, and South Korea, and this has been attributed to the consumption of preserved food containing carcinogenic nitrates.² In India the rate of incidence is less compare to the world.³ It is fifth common in males and seventh common cancer in females in India. Although incidence is decreasing

worldwide but in India especially in some states it is still increasing. Only for few countries, mass screenings for gastric cancer is widely practiced, thus, most of the patients with gastric cancer present with advanced disease of poor surgical outcome. The symptoms and sign of the stomach cancer are often reported late when the disease is already in advanced stages and 5-year survival is less than 30% in developed countries and around 20% in developing countries. Word palliative surgery means a procedure performed in the presence of unresectable advanced disease, where a successful

curative operation is not possible.⁷ Because of late presentation of the disease palliation may be the only management of the disease.⁸ Palliative surgery not only help to relieve symptoms but also complications such as bleeding, obstruction, pain, perforation due to primary tumour.^{9,10} Palliative surgery not only improves the quality of life, but also the quantity of life than conservative management.⁹⁻¹¹ Palliative surgery includes bypass procedure, resection or both combination, endoscopic procedures, feeding jejunostomy etc.^{9,10} The aim of the study was to study role of palliative surgery in carcinoma stomach.

METHODS

In the period of 5 years February 2011 - 2016 January including 6 months follow up, 104 patients diagnosed as advanced carcinoma stomach were treated in the Department of Oncosurgery and General surgery at M. K. C. G Medical College and Hospital, Berhampur, Odisha, India. All patients with symptoms and signs suggestive of carcinoma stomach were examined carefully clinically and investigated with ultrasound of abdomen and pelvis, upper gastrointestinal endoscopy, contrast enhanced computer tomography scan of abdomen, cytology, endoscopic biopsy and histopathology study. Staging of the disease by using TNM and AJCC staging system. To establish the role of palliative surgery in advanced gastric cancer study analyses the data in terms of presentation of disease, sex distribution, type of palliative surgery, relive of symptoms, preventions of complications, postoperative mortality morbidity, and overall survival.

RESULTS

In our study mean age of presentation is 58 yrs. male 67 patients, female 27 cases and male female ratio is 2.4:1 (Table 1). Table 2 showing out of 94 patients 91 patients came on out-patient department and 3 came with acute gastric perforation with peritonitis on emergency. Table 1 Among 91 patients presented with pain abdomen 61 cases (64.89%), vomiting 31(32.97%), both vomiting and pain abdomen 23 (24.46%), dysphagia 5 (5.3%), malena 4 (4.25%), anorexia and loss of appetite 4 (4.25%).

All 91 cases were preoperatively diagnosed with endoscopy followed by biopsy, CECT of abdomen pelvis, USG of abdomen, x- ray chest. In all cases it was adenocarcinoma stomach. 3 gastric perforated cases were diagnosed as post operatively with biopsy taken from perforated ulcer margin. Involved part of stomach as antrum 56 (59.57%), body 22 (23.4%), cardia 12 (12.7%), body and antrum 3 (3.19%), linitis plastica 1 (1.06%). According to TNM and AJCC staging system Stage III A 37 (39.36%), III B 35 (37.23%) and IV 22 (23.4%) Table 3. Among 94 patients palliative radical resection was done in 56 cases, subtotal gastrectomy 17(18.08%) and partial gastrectomy in 39 (41.4%) cases, feeding jejunostomy was performed in 7(7.44%) cases

and in 31 (36.17%) cases gastrojejunostomy was done (Table 4).

Table 1: Age and sex distribution of advanced carcinoma stomach.

Age	30-50 years	50-70 years
	34	60
Sex	Male	Female
	67	27

Median age of presentation; 58 years; Male: Female = 2.4:1

Table 2: Presenting symptoms in advanced carcinoma stomach.

Symptoms	No. of patients and percentage
Pain abdomen	61 (64.89%)
Vomiting	31 (32.9%)
Vomiting and pain abdomen both	23 (24.46%)
Dysphagia	5 (5.3%)
Malena	4 (4.25%)
Anorexia	4 (4.25%)
Gastric perforation with peritonitis	3 (3.19%)

Table 3 Staging of total cases according to AJCC classification.

Stage	No. of patients and percentage
III A (T2-4 and N2-0)	37 (39.36%)
III B (T3-4 and N2-1)	35 (37.23%)
IV B (T4N2M0 or Any T, N and M1)	22 (23.4%)

Table 4: Operation performed.

Type of surgery	No. of patients and percentage
Total subtotal gastrectomy	17 (18.08%)
Partial gastrectomy	39 (41.4%)
Gastrojejunostomy	31 (36.17%)
Feeding jejunostomy	7 (7.44%)

In terms of postoperative complications (Table 5) hospital stay more than 15 days in palliative resection group i.e. 24 (42.86%) patients comparatively little less in Non-resection group 16 patients (42.1%). Wound infection in 4 patients (7.14%) in resection group, non-resection group 2(5.26%). Anastomotic leakage 3 patients (5.35%) in resection group. Immediate post-operative mortality is 4 patients 7.14% comparable to the non-resection group 1 patients (2.63%). Symptoms relived 46 patients in resection group (82.14%), in non-resection group it is 16 (42.1%). Table 6 showing overall survival is (6 months - 1 years) 19 (33.9%) patients, and in non-

resection group it is only 2 (5.26%) patients. Median survival rate is 10 months.

Table 5: Postoperative complication.

Complications	No. of patients and percentage	
	Palliative resection	Non resected palliative
	group	group
Hospital stay >15 days	24 (42.86%)	16 (42.1%)
Wound infections	4 (7.14%)	2 (5.26%)
Anastomotic leakage	3 (5.35%)	0
Within 30 days mortality	4 (7.14%)	1 (2.63%)

Table 6: Outcome of palliative surgery.

	No. of patients and percentage	
	Palliative resection group	Non resected palliative group
Symptoms relived	46 (82.14%)	16 (42.1%)
Overall survival 6 months -1 year	19 (33.9%)	2 (5.26%)

DISCUSSION

In spite of recent advanced technique in the diagnosis, accurate staging of the disease, and the overall prognosis of gastric cancer remains poor due to late presentation of the disease. 12 Many of the patients of gastric carcinoma presented with vague symptoms like anorexia, weight loss, nonspecific pain abdomen etc.⁵ So over 40 years of age group every dyspepsia, dysphagia should be evaluated carefully with endoscopy should not give proton pump inhibitors or H2 blocker prior to proper diagnosis.¹³ The early diagnosis and management by R0 resection with lymphadectomy is the primary goal of treatment.¹⁴ In the management of advanced carcinoma 5 yrs. survival rate is rare. Increase quality of life, palliation of symptoms, and complications are mainstay of treatment. 15,16 A study by Lawrence W Jr and Neer MG showed that palliative surgery in carcinoma stomach is very much helpful to alleviate symptoms. 10 Another study suggested the definitive role of palliative resection in the management of advanced carcinoma stomach for palliation of symptoms.¹⁷ Increased survival is not the primary goal of palliative surgery. 18 In our study it is clearly shown in palliative resection has higher 82.14% relief from symptoms than non-resection palliative surgery group 42.1%. It is supported by various studies. In our study we found the overall survival 6 months - 1 year. is higher in palliative resection group 33.9% compare to the 5.26% in non-resection group. This fact is supported by a study by Hartgrink HH et al. showed that palliative resection may be effective on overall survival rate. 19 Palliative resection should be performed whenever it is possible for better quality of life. Gastrectomy is

beneficial when there was a serious complication like haemorrhage, gastric outlet obstruction. According to Zwaveling longer median survival in palliative resection group, in our study also median survival is 10 months in resection group, and much lower 3 months in non-resection group. ²¹

CONCLUSION

Nonspecific symptoms like dyspepsia, pain abdomen, and dysphagia should be evaluated carefully keeping in mind it may be a case of carcinoma stomach. Palliative resection should be carried out for betterment of quality of life where it is possible. Relief from symptoms and complications can be achieved by resection of tumour mass in advanced carcinoma stomach. Increase Survival rate is not the primary concern in palliative surgery in the management of advanced carcinoma stomach. Although median survival may be increase in palliative resection of tumour mass.

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institutional ethics committee

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