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Original Article

Surgical Treatment in Advanced Carcinoma Stomach: A Retrospective Study

Charan Panda[1], A Trishul Senapati[2*], Manas Ranjan Behera[3], Nalini Kanta Mohanty[4]
[1]Professor & Head, [2]Post Graduate Student (3rd Year), [3]Assistant Professor, [4]Senior Resident,
Department of General Surgery, MKCG Medical College, Berhampur, Odisha, INDIA.

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***Correspondence to:**
A Trishul Senapati
Post Graduate Student,
Department of General Surgery, MKCG Medical College,
Berhampur, Odisha.
ats001janu@gmail.com

ABSTRACT

Surgery remains the main modalities of treatment in advanced carcinoma stomach. The overall survival in patients with advanced gastric carcinoma is low, even in those patients who undergoing surgical resection. The quality of life of these patients with advance gastric cancer is also important. We should always think about these factors like survival benefit, quality of life of the patients when we plan for the treatment for these patients and should carefully individualized. In this present retrospective study we will observe how the surgical treatment modalities available here are impacting those important factors, so that we can choose and give proper treatment for the patient care and benefit.

KEYWORDS: Advanced carcinoma stomach, Palliative surgery, Quality of life.

INTRODUCTION

Carcinoma stomach is one of the greatest killers of mankind. It is found in most of the countries but more prevalence in Japan, Chile, Finland and Scandinavian countries. In India carcinoma stomach is also common form of malignancy.

Disease is curable only in it's early stage. So important thing is to detect the early stage and treat it immediately. Unfortunately there are rarely symptoms associated with early Ca stomach and when these symptoms occur they are quite vague and nonspecific. So most of the time patients ignore and when patients presents with symptoms, the disease is already advanced. In this stage patient is beyond the scope of curable treatment. This scenario is more common in this part of the world.

Now a days, in the era of technical edge, various palliative modalities of treatment available for the patients of advanced carcinoma stomach. Still surgical method is the main stay of treatment, which can be associated with other methods like radiotherapy, chemotherapy, endoscopic stenting or combination. So different procedure or combination of treatment modalities are given to ideal patients, so that patients will benefit maximally from these treatments. In spite of advances in surgical technique, the treatment of Carcinoma stomach has remained unsatisfactory. 5 year survival doesn't rise above 20%.

MATERIALS AND METHODS

The present study was an observation on surgical treatment in advanced carcinoma stomach admitted to the General Surgical ward of M.K.C.G. Medical College & Hospital, Berhampur, Odisha for a period of September 2013 to August 2015. The selection of cases was done on basis of their clinical signs and symptoms supported by different investigations to make a diagnosis. Then the patients were undergone surgical procedure and the results were compared on basis of relief of symptoms, progress of disease, and period of survival during the follow up period.

Methods

The detailed clinical history of each patient was taken. All patients were evaluated completely with physical examination and investigation (Haemoglobin, Differential Count, Total Leucocyte Count, Erythrocyte Sedimentation Rate, Blood grouping ,stool for occult blood, Liver Function Test, Urine for routine and microscopy Bleeding Time, Clotting Time, Serum Protein, Serum Na^+ K^+ Urea Creatinine, Ultrasonography of Abdomen and pelvis, Chest X-ray, upper gastrointestinal endoscopy with biopsy, Fine Neddle Aspiration Cytology if Virchow's node, skeletal X-ray). After evaluation (by confirming diagnosis and assessing extent of spread) patients under gone operation which includes only palliative purpose.

Non operable cases were excluded and sent for chemotherapy.

Following types of surgical procedure were done

1. For distal mobile growth: Partial gastrectomy with Gastro-jejunostomy and Jejuno-jejunostomy. (GJ & JJ)
2. For obstructive fixed pre-pyloric growth: Palliative GJ and JJ (anticolic).
3. Where palliative operation not feasible to carry out, then simply abdomen was closed by taking biopsy from mass and omentum, subsequently patients sent for chemotherapy.

Abdomen closed by midline below umbilicus skin incision. After opening the peritoneum, lesion was identified with its extension, fixicity.

1. If lesion in distal part of stomach and mobile: Partial gastrectomy with GJ and JJ.
2. If the growth in distal part and fixed: Anticolic GJ and JJ.
3. If the growth was fixed and present in body: Abdomen closed and sent for chemotherapy.

Post-operative complications observed like (early: respiratory complication, vomiting, wound infection, hemorrhage, late: anemia, dumping syndrome). The patients were followed up to January 2016.

RESULTS

Total 36 cases were studied. Here in this study maximum number of patients were in age group of 51 to 60 years. Next common age group being 61 to 70 years. Both constitutes 63.8%.

Males are most commonly affected than females with Male:Female=3:1. Most of the patients presented with loss of appetite and vomiting. Next common symptoms being sense of fullness, pain abdomen, flatulence. Most of the patients having symptoms of duration of 4-6 months.

Table 1: Distribution of age group

Age Group in Years	Number	Percentage (%)
21 – 30	1	2.77
31 – 40	2	5.55
41 – 50	10	27.77
51 – 60	12	33.33
61 – 70	11	30.55
Total	36	100

Table 2: Sex Distribution

Sex	No. of Cases	Percentage (%)
Male	27	75
Female	9	25
Total	36	100

Table 3: Presenting symptoms

Symptoms	No. of Cases	Percentage (%)
Loss of appetite	32	88.88
Vomiting	31	86.11
Sense of fullness	24	66.66
Pain Abdomen	20	55.55
Flatulence /Indigestion	19	52.77
Loss of weight	15	41.66
Mass in Abdomen	13	36.11
Swelling in abdomen	7	19.44
Black Stool	6	16.66
Hematemesis	1	2.77

Table 4: Duration of Symptoms before Admission

Duration in Months	No. of Cases	Percentage (%)
0 – 3	10	27.77
4 – 6	16	44.44
7 – 12	6	16.66
> 12	4	11.11

Table 5: Physical Sign

Signs	No. of Cases	Percentage (%)
Anaemia	35	97.22
Palpable Epigastric Lump	20	55.55
Visible peristalsis	18	50
Metastatic liver	15	41.66
Ascitis	13	36.11
Jaundice	5	13.88
Blummer's shelf	3	8.33
Virchow's node	2	5.55
Subcutaneous nodule around umbilicus	1	2.77

Table 6: Type of Surgery

Type of Surgery	No. of Cases	Percentage (%)
Palliative partial gastrectomy with GJ and JJ	25	69.44
Only GJ&JJ	10	27.77
No Procedure	1	2.77

Table 7: Post-Operative Complication

Type	No. of Cases	Percentage (%)
Early		
Respiratory complication	3	8.57
Vomiting	1	2.85
Wound infection	2	5.71
Haemorrhage	1	2.85
Late		
Anaemia	2	5.71
Dumping syndrome	1	2.85

Table 8: Survival of Patients with Different Procedure

Procedure	No. of Cases	Months			
		0-3	4-6	7-9	10-12
Partial gastrectomy with GJ & JJ	25	25	23	22	19
Only GJ&JJ	10	9	7	4	1
No procedure	1	1	0	0	0

Most of the patients having anaemia. The next common being palpable epigastric lump, visible peristalsis. On doing upper GI endoscopy, it shows growth in all 36 cases i.e. 100%.On biopsy of those growths, it shows adenocarcinoma in all 36 cases (100%). On laparotomy, the site of growth was found at antrum in 31 Cases and at body / fundus in 5 cases. Most of the patients had undergone partial gastrectomy with GJ and JJ.

Most common early complication are respiratory complication, wound infection. Late complication being Anaemia. Maximum survival was found in patients who had undergone partial gastrectomy with GJ and JJ.

DISCUSSION

In this present study the majority of patients were of age group 51 to 60. Nashimoto also shows the same results. Most of the patients are male with Male:Female = 3:1, which is same as Norman Williams[1]. Similar sex incidence has been found by Arid Gupta et al, Prakash et al. In India, females are less affected probably because less incidence of alcohol and smoking intake among females.

Patients having common symptoms like loss of appetite, vomiting, sense of fullness, pain abdomen and most of the signs are anaemia, palpable epigastic lump. These observations are comparable to Gupta et al, Okines and Ahn et al.[2]

Most of the symptoms are developed during last 6 months, which corresponds to J.C.Hendrick, who reported average duration of symptoms to be 5 months.

All patients undergone Upper GastroIntestinal Endoscopy and mass was found, which get confirmed on biopsy as adenoma. So it has high sensitivity and specificity value. This is correlating with Sinha R and Anderson study[3]. Most of the growths were found in pylorus or antral region.

All the patients are undergone laparotomy, out of which 25 patients had undergone partial gastrectomy with GJ and JJ, as the growth was found to be as antropyloric region and growth was mobile. In rest 10 patients underwent only GJ and JJ, as the growth is fixed. In 1 pt growth is fixed to surrounding structure with multiple hepatic metastasis and peritoneal metastasis. So here nothing can be done with lesion, so abdomen closed by taking specimen for biopsy. Kokkola et al reported that out of 280 cases, 70% undergone non curative resection and 5 cases undergone radical surgery and remaining were unfit for surgery, which is comparable to present study[4]. Ko K J et al did palliative surgery in 46.6% of cases[5].

Post operatively early complications like respiratory complication found in 3 cases, wound infection in 2 cases, vomiting and haemorrhage each in 1 cases. Late complication like anaemia found in 2 cases and dumping syndrome in 1 case.

When the patients are followed up for subsequent 1 yr, the survival rate was found to be maximum in patients those were undergone resection of lesion and these patients have improved quality of life(due to removal of tumor load).Those patients undergone only GJ and JJ without resection, have only improved quality of life, but survival rate not changed significantly.

CONCLUSION

Inspite of all advances made in surgical technique and treatment modalities, the mortality of advanced Ca stomach is still high with poor prognosis. Surgery offers the only hope in the treatment of Ca stomach in early stages with good results. When we talk about advanced Ca stomach, surgery provides a good palliative treatment for which patients lives a good quality of life. Combined with other modalities of treatment like chemotherapy, or radiotherapy, the survival benefit is there, but the mortality rate is still high with very poor prognosis.

REFERENCES

1. Norman S Williams and Christopher J.K. Short practice of surgery, Bailey & Love, 26th edition, 2012

2. Okines A, Verheij M, Allum W, Cunningham D, Cervantes A. Gastric cancer: ESMO Clinical practice Guidelines for diagnosis, treatment and follow up. Ann Oncol 2010; 21 Suppl 5: v50-v54.

3. Sinha R, Anderson DE, Mcdonald SS, Greenwald P Cancer risk and diet in india. J Postgrad Med 2003; 49:222-8.03

4. Kokkola A, Louhimo J, Puolakkainen P. Does non-curative gastrectomy improve survival in patients with metastaticgastric cancer? Surg Oncol 2012; 106: 193-196.

5. Ko KJ, Shim JH, Yoo HM, O SI, Jeon HM, ParkCh Song KY. The clinical value of non-curative resection followed by chemotherapy for incurable gastric cancer. World J Surg 2012; 36: 1800-1805.

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