



Clinico-Pathological Study of Carcinoma Stomach over a Period of one year in a Tertiary Care Centre

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Abstract

Background: Carcinoma stomach is the 5th most diagnosed cancer and 3rd leading cause of death from cancer worldwide. Most tumors are diagnosed within 4th to 7th decades of life. Patients generally present in advanced stage, when early gastric cancer is identified survival rates are comparatively greater. The present study aims to evaluate the various modes of presentation of carcinoma stomach, treatment strategies and the associated morbidity and mortality for a better outcome.

Materials and Methods: A Retrospective study was conducted on 25 patients of carcinoma stomach in the Department of General Surgery, Andhra medical college, King George Hospital, Visakhapatnam from January 2017 to December 2017. Patients presenting with symptoms suggestive of gastric cancer were admitted, examined, investigated using CT, upper GI endoscopy and operated during this period. Factors studied were, epidemiology, mode of presentation, endoscopy findings, CT findings, treatment, associated morbidity and mortality.

Results: Of the 25 patients studied 18 were male and 7 were female, most common age group being 50-60 years. Anemia, vomiting, pain abdomen were the most common modes of presentation. Most common site was the pylorus and antrum. 32% of patients underwent curative resection and the rest had palliative treatment. Most common histopathology was infiltrating intestinal type. Mortality rate in our study was 12%.

Conclusion: Carcinoma stomach was seen most commonly after 5th decade of life. Unfortunately, most cases were diagnosed in advanced stage. Symptoms like weight loss, vague abdominal pain should alert the possibility of gastric cancer. Increasing the awareness regarding etiology and varied clinical presentation is needed for early detection. Early diagnosis through prompt screening helps in reduction of mortality and morbidity.

Keywords: Ca stomach, upper GI endoscopy, diffuse type, infiltrating type.

Introduction

Gastric cancer (GC) is a significant cause of morbidity and mortality worldwide.

Carcinoma stomach is the 5th most diagnosed cancer and 3rd leading cause of death from cancer worldwide.

Helicobacter pylori is a definite carcinogen.

Intestinal metaplasia is risk factor for gastric carcinoma.

Early diagnosis helps in accurate diagnosis curation of the disease.

Materials and Methods

This study was conducted at Department of General Surgery, King George Hospital, Visakhapatnam from January 2017 to December 2017. Patients presenting with symptoms suggestive of gastric cancer were admitted,

examined, investigated using CT, upper GI endoscopy and operated during this period. Factors studied were epidemiology, mode of presentation, endoscopy findings, CT findings and treatment.

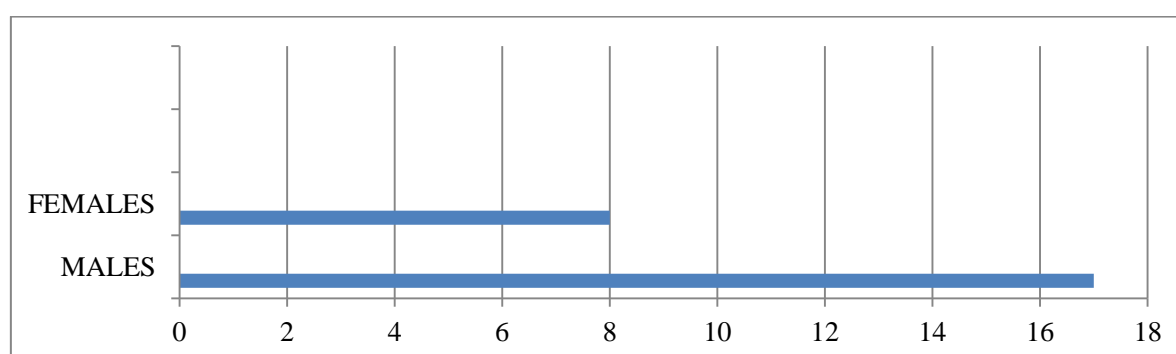
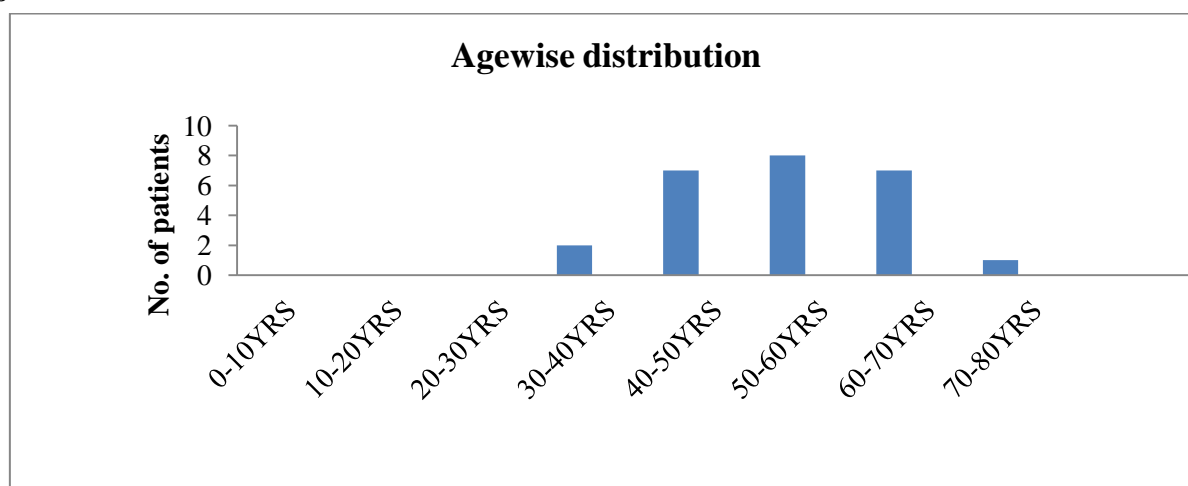
Inclusion Criteria

- 1) Males and females in age group ranging from 20-75yrs.
- 2) Patients with gastric cancer confirmed on histopathology were included in the study.

Exclusion Criteria

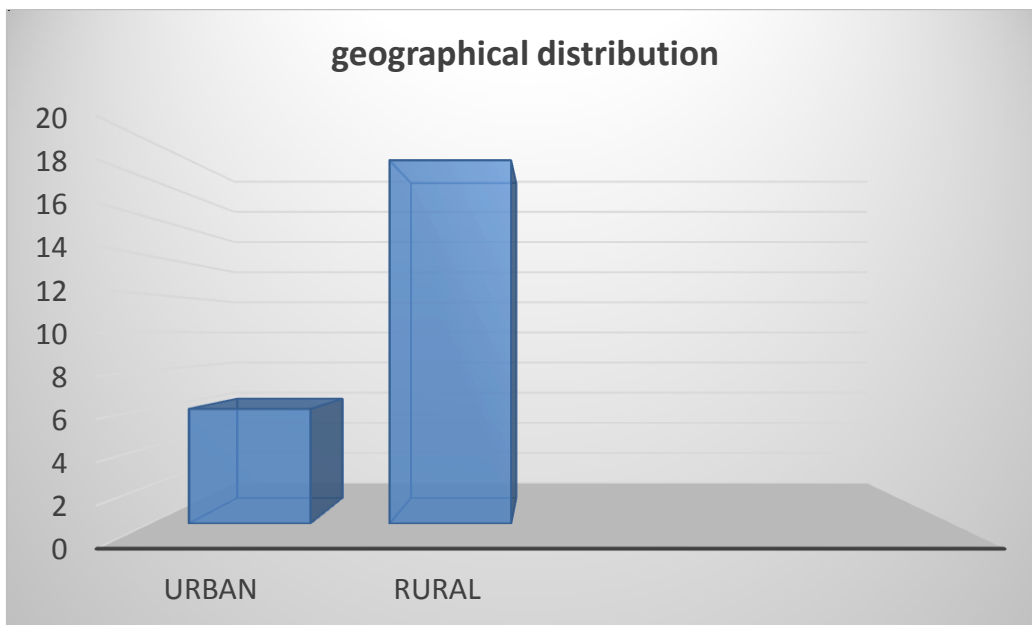
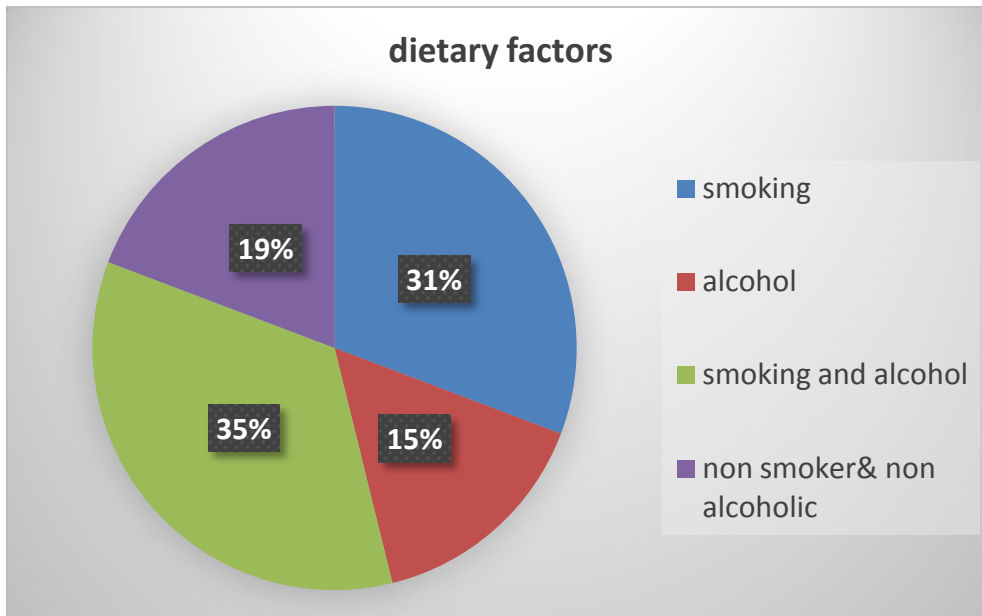
- 1) Patients who did not consent for the study.
- 2) Patients below the age group 20 and above 75 years.
- 3) Patients diagnosed with acid peptic disease and benign gastric ulcer were excluded.
- 4) Co-morbid conditions like cardiac disease and renal failure.

Results

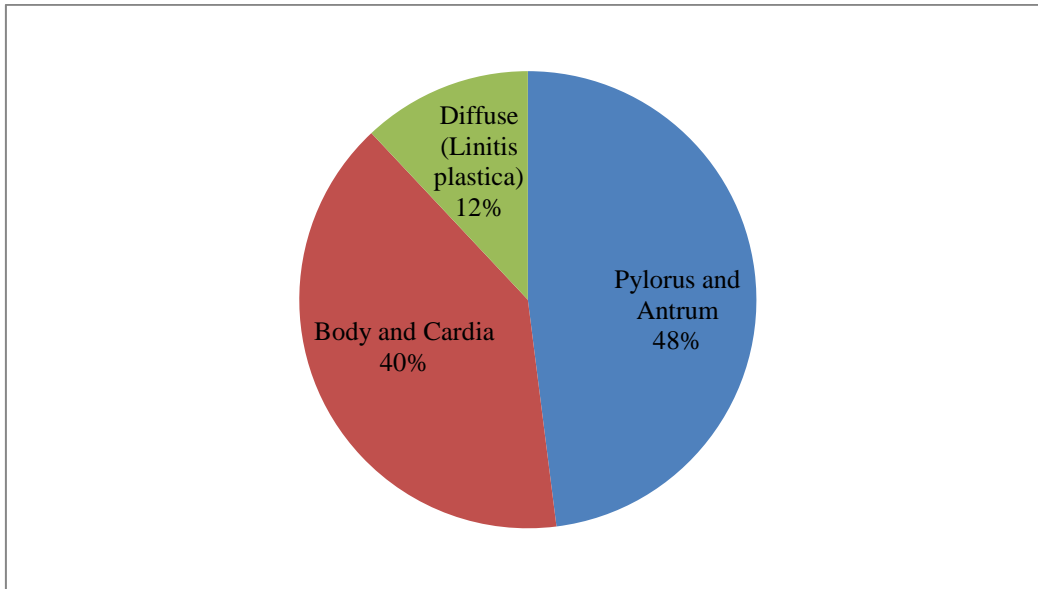


Mean age group in this study was 54.2 years.

Carcinoma stomach commonly presents in males

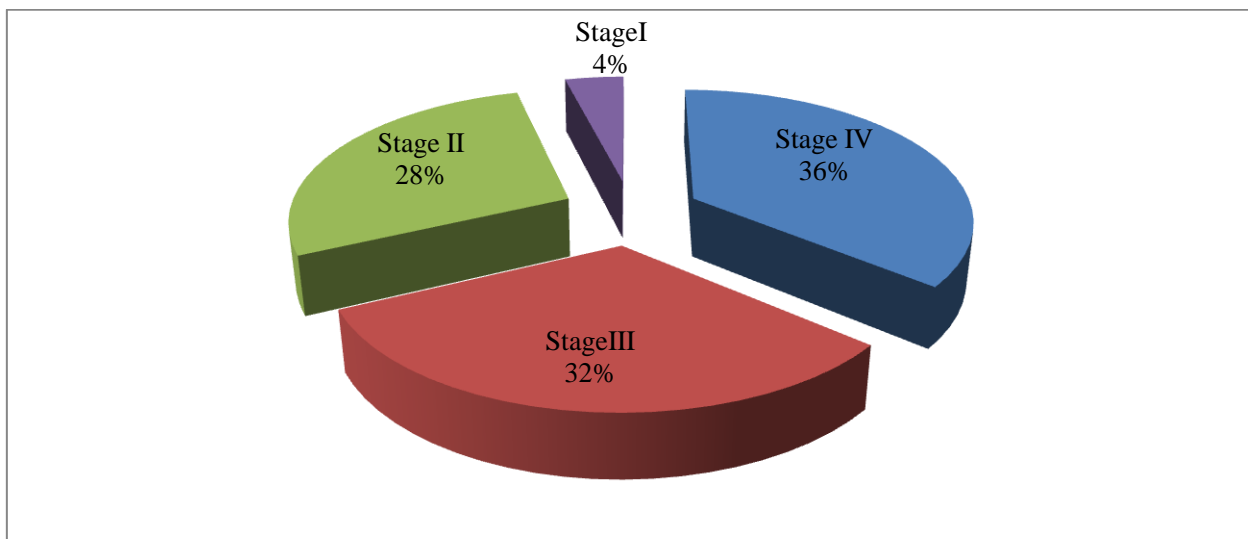


CLINICAL FEATURES	Number of patients	Percentage
Vomiting	19	76%
Pain abdomen	18	72%
Anorexia	12	48%
Dysphagia	10	40%
Jaundice	01	4%
Gastric outlet obstruction	15	60%
Hematemesis & malena	02	8%
Left supra-clavicular lymph node positivity	05	20%
Weight loss	15	60%
Anemia	16	64%
Mass per abdomen	09	36%



Site of presentation

On endoscopy tumour was found at the body & cardiac end in 10 patients (40%), at pylorus and antrum in 12 patients (48%), Linitis plastica in 3 patients (12%)..



Nine patients (36%) presented at stage IV and 3 patients (12%) in stage IIIA & IIIB each. Rest of the patients presented with stage IIIC (8%), IIA (20%), IIB (8%) and IA (4%).

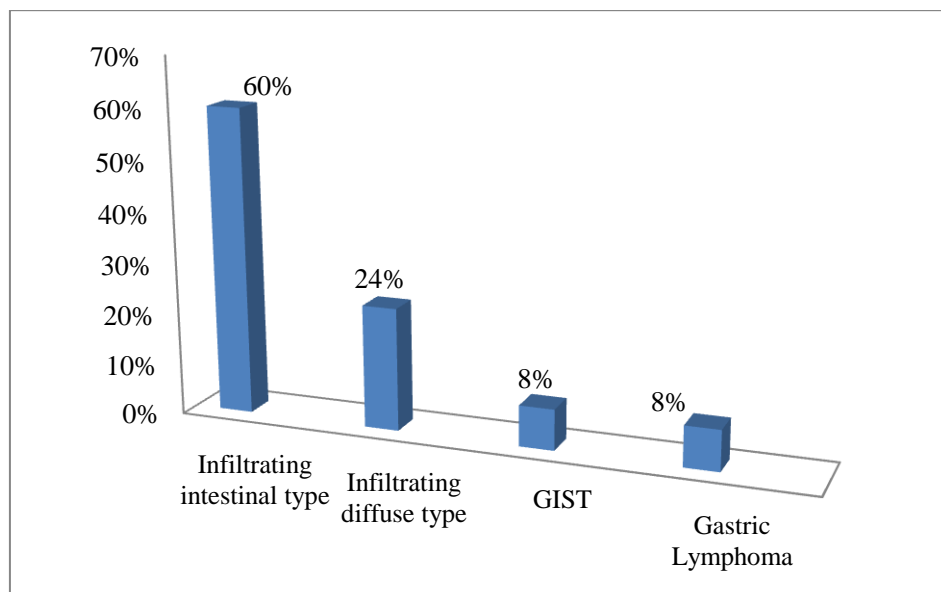
Curative resection	8	32%
Total gastrectomy	3	12%
Subtotal gastrectomy	5	20%
Palliative treatment	17	68%
GastroJejunostomy	7	28%
Feeding Jejunostomy	8	32%
Palliative chemoradiation	17	68%

Curative resection was possible in 8 patients (32%). Total gastrectomy was performed in three

patients (12%), while subtotal gastrectomy was undertaken in 5 patients (20%).

Palliative Gastro Jejunostomy was performed in 7 patients (28%) and Feeding Jejunostomy was done in 8 patients (32%).

Chemotherapy was given to 8 patients (53.3%) patients while radiotherapy was given to 2 patients (13.3%). Mortality was 3(12%).



Histopathology

Histopathological diagnosis was diffuse infiltrating adenocarcinoma in 6 (24%), infiltrating intestinal type in 15(60%) and gastric lymphoma in 2 (8%) and GIST in 2 (8%) patients.

Discussion

Gastric cancer is a significant cause of morbidity and mortality worldwide. The majority present in the age group 40 -70yrs. BYRNE et al studies also showed similarity regarding age distribution.

Carcinoma stomach commonly presents in males.¹ The role of *Helicobacter pylori* infection, smoking and alcohol has been associated with increased risk of gastric cancer².

Carcinoma of stomach most commonly presents with vomiting, vague abdominal pain, anorexia, dysphagia. Most of the cases presented with vomiting followed by pain abdomen in this study. Most of the cases present in advanced stage. Early lesions diagnosed with increased use of endoscopy. Curable if detected early. Current therapeutic strategies still remain far from optimal^{3,4}.

Following investigations helps in early diagnosis of the cancer-

- Upper GI endoscopy and biopsy
- Chest /abdomen/pelvic CT with contrast.
- PET evaluation if indicated.
- EUS if no evidence of M1 disease (preferred)
- Endoscopic resection for accurate staging of early stage cancers.
- Staging laparoscopy.

In this study 40% of the patients were diagnosed to have cardiac end cancer. These lesions are diagnosed early with the increased use of upper GI endoscopy.

Gastric cancers can be curable if detected early. For 68% of patients palliative care was given in this study. Curative therapy involves surgical resection, total or subtotal gastrectomy with an accompanying lymphadenectomy^{5,6}.

The combination chemotherapy with irinotecan, 5-FU and leucovorin were considered for neoadjuvant therapy for a better outcome⁷. In this study 52% were given chemotherapy,16% were given radiotherapy, 32% were not on chemoradiation.

Current treatment for advanced gastric cancer has shifted away from gastric resection toward primary chemotherapy and radiation therapy⁸. The

diffuse type occurs in relatively younger individuals and has a poor prognosis compared with the intestinal type⁹.

Diffuse infiltrating type occurred in 24% & infiltrating intestinal type occurred in 60% patients in this study. Most patients presented with advance stage disease in stage IV and III, Ann et al study also reported late presentation of the tumour¹⁰

The main modalities for staging gastric carcinoma are endoscopy, EUS, cross sectional imaging such as CT, MRI, PET, diagnostic laparoscopy.

Through these above methods prompt early detection helps in increasing survival rates.

Conclusion

Carcinoma stomach was seen most commonly after 5th decade of life. Unfortunately, most cases were diagnosed in advanced stage. Symptoms like weight loss, vague abdominal pain should alert the possibility of gastric cancer. Increasing the awareness regarding etiology and varied clinical presentation is needed for early detection. Early diagnosis through prompt screening helps in reduction of mortality and morbidity.

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