INTRODUCTION
Stomach cancer is the fourth most common cancer diagnosed and the second most frequent cause of cancer related death worldwide. More than one-half of gastric cancer patients have lymph node metastases when they are initially diagnosed or operated, which results in poor prognosis. It frequently presents with advanced disease. Despite the decreasing worldwide incidence, gastric cancer accounts for 3-10% cancer related deaths. The two biological entities i.e. diffuse and intestinal types are different as regards with epidemiology, etiology, pathogenesis, and tumour behaviour. Diffuse type occurs in relatively younger individuals and has poor prognosis compared with the intestinal type. Incidence of gastric carcinoma has been declined in most parts of the world, and incidence pattern differ by histological type and anatomic site, but prevalence of the upper and middle third location of gastric cancer have increased while that involving lower third has decreased. The present study was conducted to find out the clinical profile of carcinoma stomach in patients presenting in a tertiary care centre in Pakistan.

METHODOLOGY
This study was conducted at a single unit, Department of General Surgery, Civil Hospital, Karachi, affiliated with Dow University of Health Sciences (DUHS), Pakistan, from April 2006 to April 2010. Patients histologically confirmed as having carcinoma stomach were included in the study. Patients diagnosed with acid peptic disease and benign gastric ulcer were excluded. Variables studied were, age, gender, mode of presentation, presenting complain, endoscopy findings, palpable supraclavicular lymph node, histopathology, stage and treatment. Data was analyzed for descriptive statistics.

RESULTS: Total number of patients were 15, include 9 males (60%) and 6 females (40%); male female ratio was 1.5:1. Mean age was 48.6 ± 4.47 years, ranging from 26-65 years. Majority of the patients (n=9, 60%) were presented through outpatient department, while the rest presented through emergency. Common presenting complaines were vague upper abdominal pain, mass, ascites, peritonitis and hematemesis. On endoscopy tumour was found at the cardiac end in 5 patients (33%), at pylorus and antrum in 6 patients (40%), linitis plastica in 2 patients (13.3%), only body and body and pylorus were involved in 1 patient (6.7%) each. Ten patients (66.6%) presented at stage IV and 3 patients (20%) in stage III. Surgical resection was possible in 5 patients (33.3%). Total gastrectomy was performed in one patient (6.7%), while subtotal gastrectomy was undertaken in 4 patients (26.7%). Palliative gastrojejunostomy was performed in 4 (26.7%) and feeding gastrostomy and endoscopic stenting in 2 patients (13.3%) each. Chemotherapy was given to 8 patients (53.3%) patients while radiotherapy to 2 patients (13.3%). Histopathological diagnosis was diffuse infiltrating adenocarcinoma in 10 (66.6%), infiltrating intestinal type in 3 (20%) and gastric lymphoma in 2 (13.3%) patients. Mortality was 13.3%.

CONCLUSION: Majority of the patients with gastric carcinoma were young males, presenting with advanced stage disease. Only 33% tumours were resectable while 53.3% tumours were managed by palliative treatment. Overall mortality was 13.3%.

Key words: Carcinoma stomach. Gastric cancer. Infiltrating intestinal type carcinoma. Diffuse carcinoma. Gastric lymphoma.
stage the disease. Surgical treatment was planned according to the site and staging of the tumour. Postoperative complications and mortality was also recorded. Histopathology reports were assessed to document the type of tumour, the tumour-free margins, lymph node status and grading of the tumours. Neoadjuvant chemoradiation was given for advanced tumour and only radiotherapy was used for gastric lymphoma. Mean ±SD was determined for numerical variables, whereas, frequencies and percentages were computed for categorical variables.

RESULTS

Total number of patients were 15; male (n=9, 60%) to female (n=6, 40%) ratio was 1.5:1. Mean age was 48.6 ± 4.47 years, ranging from 26-65 years. Majority of the patients (n=9, 60%) presented through outpatient department, while 40% (n=06) presented through emergency. Vague upper abdominal pain, mass, ascites, peritonitis and hematemesis were common presenting complaints. Supraclavicular lymph nodes were palpable in 7 (46.7%). Endoscopy was performed in 11 (73%) patients who presented in outpatient department, however, it was not performed in patients presented to emergency department. Table I describes the location of tumour diagnosed on endoscopy. Per-operative diagnosis was made in 4 (26.7%) cases, all of whom had presented at the emergency department. Ten patients (66.6%) had stage IV disease, while 3 (20%) cases were in stage III and 2 (13.3%) had stage II disease. None of the patient was recorded as stage I. Curative surgery was possible only in 5 patients (33.3%); among them, total gastrectomy was performed in one (6.7%) case, while 4 (26.7%) patients were managed by subtotal gastrectomy. Gastrojejunostomy were performed for distal tumours in 4 (26.7%) patients, whereas stenting was achieved in 2 (13.3%) cases for tumour of oesophagael junction for palliation of their symptoms. Chemotherapy was given to 8 (53.3%) patients, and radiotherapy to 2 (13.3%) cases. In 5 (33.3%) cases, no adjuvant chemoradiation was given. Histopathological diagnosis was diffuse infiltrating adenocarcinoma in 10 (66.7%), infiltrating intestinal type in 3 (20%) and gastric lymphoma in 2 (13.3%) patients. Overall mortality was (13.3%) quite high might be due to its late presentation (Table II).

Table I: Clinical presentation.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Presentation</td>
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</tr>
<tr>
<td>Out patient department</td>
<td>9</td>
<td>60.0</td>
</tr>
<tr>
<td>Emergency</td>
<td>6</td>
<td>40.0</td>
</tr>
<tr>
<td>Presenting complain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper abdominal pain</td>
<td>10</td>
<td>66.6</td>
</tr>
<tr>
<td>Peritonitis</td>
<td>4</td>
<td>26.7</td>
</tr>
<tr>
<td>Dysphagia</td>
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</tr>
<tr>
<td>Mass</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td>Hematemesis</td>
<td>3</td>
<td>20.0</td>
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<tr>
<td>Ascites</td>
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</tr>
<tr>
<td>Gastric outlet obstruction</td>
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<td>06.7</td>
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<tr>
<td>Supraclavicular lymph nodes</td>
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<td></td>
</tr>
<tr>
<td>Negative</td>
<td>8</td>
<td>53.3</td>
</tr>
<tr>
<td>Positive</td>
<td>7</td>
<td>46.7</td>
</tr>
<tr>
<td>Upper GI endoscopy</td>
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<td></td>
</tr>
<tr>
<td>Yes</td>
<td>11</td>
<td>73.3</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>26.7</td>
</tr>
<tr>
<td>Site</td>
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<td></td>
</tr>
<tr>
<td>Cardia and body</td>
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</tr>
<tr>
<td>Pylorus and antrum</td>
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<tr>
<td>Limitis plastica</td>
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<td>13.3</td>
</tr>
<tr>
<td>Body</td>
<td>1</td>
<td>06.7</td>
</tr>
<tr>
<td>Body and pylorus</td>
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Table II: Diagnosis and treatment.

<table>
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<td>Stage IV</td>
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<tr>
<td>Stage III</td>
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<tr>
<td>Stage II</td>
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<tr>
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<td>Subtotal gastrectomy</td>
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<td>Palliative treatment</td>
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<tr>
<td>Gastrojejunostomy</td>
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<tr>
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<td>13.3</td>
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<tr>
<td>No chemoradiation</td>
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<td>33.3</td>
</tr>
<tr>
<td>Histopathology</td>
<td>15</td>
<td></td>
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<tr>
<td>Infiltrating diffuse p d adeno ca</td>
<td>10</td>
<td>66.6</td>
</tr>
<tr>
<td>Infiltrating intestinal adeno ca</td>
<td>03</td>
<td>20.0</td>
</tr>
<tr>
<td>Gastric lymphoma</td>
<td>02</td>
<td>13.3</td>
</tr>
<tr>
<td>Hospital mortality</td>
<td>02</td>
<td>13.3</td>
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</table>

DISCUSSION

Carcinoma stomach commonly presents in males, as seen in this study. Gastric cancers are classified by location within the stomach: cardia, fundus, body, distal (antrum and pylorus), and lesser or greater curvature. Some studies have shown a striking increase in gastric cardia cancer in the United States since 1970s, although the incidence of stomach cancer as a whole has decreased. Cardia carcinoma rates are the highest among whites and are notably higher among males. The role of Helicobacter pylori infection and diet has been associated with increased risk of gastric cardia cancer. In this study 33.3% cases were diagnosed with cancer of the cardiac end. These lesions are diagnosed with the increased use of oesophago-gastroendoscopy.

Gastric cancer is curable if it is detected early, however, many patients are diagnosed with late stage disease. Inspite of advances in management protocols, current therapeutic strategies still remain far from optimal.
Only palliative treatment were given to 53.3% patients in this series. Current strategies including surgery and combination chemotherapy provide modest survival benefits in advanced gastric cancer only. Curative therapy involves surgical resection, total or subtotal gastrectomy with an accompanying lymphadenectomy. 

The combination chemotherapy with irinotecan, 5-FU and leucovorin considered as a second line treatment in taxane- and platinum-treated, unresectable tumour. Chemotherapy was given to 53.3% patients in this study. Current treatment for advanced gastric cancer has shifted away from gastric resection toward primary chemotherapy and radiation therapy.

Gastric cancers are classified into intestinal and diffuse types based on histopathology, as initially described by Lauren. There is little role of stenting in palliating the malignant dysphagia in lower third of the oesophagus involving gastroesophageal junction performed in 13.3% in this series. The two biological entities are different with regards to epidemiology, etiology, pathogenesis, and tumour behaviour. The diffuse type occurs in relatively younger individuals and has a poor prognosis compared with the intestinal type, as reported on histopathology infiltrating diffuse type in 66.6% and intestinal type (20%) in this series. Most patients presented with advance stage disease in stage IV and III, another study also reported late presentation of the tumour.

The main limitations of this study are a small number of cases and single unit report.

**CONCLUSION**

Carcinoma stomach was seen mostly in young male patients, presenting late with advanced disease in stage III and IV in emergency. Only 33% tumours were resectable while 66.7% patients were managed by palliative treatment. Overall mortality was 13.3% due to its late presentation.

**REFERENCES**


