

# Gastric Carcinoma: Presentation at a Tertiary Care Hospital in Peshawar

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## ABSTRACT

**Aim:** To know the common clinical presentation of gastric carcinoma.

**Methods:** This cross sectional study was conducted in gastroenterology unit HMC from January to August 2010. One hundred and thirteen patients of more than 30 years of age and having endoscopic and biopsy proven gastric carcinoma were included in the study. All patients after necessary investigation were prepared for endoscopic examination, upper gastrointestinal endoscopy was done and findings were recorded. Biopsies of the lesions were taken for histopathological confirmation.

**Results:** Seventy five (66.4%) patients were males and 38(33.6%) were females. The mean age was  $56.02 \pm 12.11$  years. Seventy seven patients (68.1%) had pain epigastrium, 75(66.4%) weight loss, 64(56.6%) postprandial vomiting, 59(52.2%) anorexia, 49(43.3%) dyspepsia, 38(33.6%) early satiety and 19(16.8%) GI blood loss. Anemia was present in 57(50.4%) patients, mass epigastrium in 39(34.5%) and lymph nodes in 13(11.5%) patient.

**Conclusion:** Gastric carcinoma is a male predominant neoplasm which usually present with pain epigastrium, weight loss, postprandial vomiting, anemia and mass epigastrium.

**Key words:** Gastric carcinoma, clinical presentations, physical findings

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## INTRODUCTION

Gastric carcinoma is malignancy of the stomach and remains a common disease worldwide with a dismal prognosis. It represents the fourth most frequent malignancy and second leading cause of cancer related death worldwide<sup>1</sup>. It comprises about 24% of all gastrointestinal malignancies<sup>2</sup> and causes over 700000 deaths per year in the world<sup>3</sup>. In most countries, the incidence of gastric cancer has been declining over the past few decades. Nonetheless, due to the rapidly growing populations in developing countries with high background incidence rates for gastric cancer, the total number of gastric cancer cases in the world has actually remained static. The highest incidence rates are found in Asia (especially Japan), Central Europe and South America<sup>4</sup>.

Gastric cancer has a predilection for elderly patients, with incidence peaks in the seventh decade. Men are more commonly affected than women with male incidence rates double those for females. Besides gender differences, the incidence of gastric cancer also appears to be inversely related to social class. Rates are higher in unskilled laborers (class V) and lower in professional groups (class I)<sup>5</sup>.

Gastric cancer is generally asymptomatic until the disease is quite advanced.<sup>6</sup> Frequent symptoms are weight loss and abdominal pain<sup>7</sup>. Persistent vomiting can occur in antral tumors obstructing the gastric outlet. Dysphagia may be present with tumors

obstructing the gastroesophageal junction. Early satiety may suggest a diffusely infiltrative tumor resulting in loss of distensibility of the stomach. Gastrointestinal bleeding has been reported in about 10%–15% of patients<sup>8</sup>. A gastric mass is palpated in less than 20% of patients. Signs of metastatic spread include a left supraclavicular node, an umbilical nodule, a rigid rectal shelf and ovarian metastases<sup>4</sup>.

The rationale of this study was to know the age and gender wise distribution and common clinical presentation, that is the presenting complaints of patients and physical findings of gastric carcinoma in our local set up, which could be utilized in formulating surveillance and management strategies of gastric ca

## SUBJECTS AND METHODS

This cross sectional descriptive study comprising of 113 patients was carried out in the department of Gastroenterology and Hepatology, Hayatabad Medical Complex Peshawar from January 2010 to August 2010. Patients of both gender, age more than 30 years, having clinical suspicion of gastric carcinoma and endoscopic and biopsy proven gastric carcinoma were included in the study. All those patients were excluded from the study who were either unfit for the upper gastrointestinal endoscopy on the basis of hemodynamic instability or some other co morbid- conditions and were high risk for the procedure. Similarly patients with benign gastric tumours, gastric lymphoma and carcinoid tumors of stomach were excluded from the study to

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minimize bias in the study. Proper approval was taken from the Ethical Committee of the institution before starting the study. Informed consent was taken from all patients seen in OPD having suspicion of gastric carcinoma, and either assessed in OPD or admitted to the ward and evaluated by detailed history, thorough clinical examination, and appropriate investigations. All patients were prepared for endoscopic examination, upper endoscopy was done and findings were recorded. At least 5-7 normal size biopsies of the lesions were taken for histopathological confirmation. All those patients who fulfil the inclusion criteria and gave consent were included in the study. Data was analyzed by using SPSS version 10. Mean $\pm$ SD was calculated for continuous variables like age. Frequencies were calculated for categorical variables like clinical presentations and physical findings of the patients.

## RESULTS

A total of 113 patients were included in this study. Out of 113 patients 75(66.4%) were male and 38(33.6%) were female with a male to female ratio of 1.97:1 (Table 1). The mean age was 56.02 $\pm$ 12.11 years with minimum age of 30 years and maximum age of 80 years. Majority of patients, 66(58.4%) were in the age range of 46-60 years (Table 2).

Table 1: Frequency and percentage of genders

Gender	n	%age
Male	75	66.4
Female	38	33.6

Table 2: Frequency and percentage of age

Age (years)	n	%age
30-45	22	19.4
46-60	66	58.4
61-75	23	20.4
>75	2	1.8
Mean $\pm$ SD	56.02 $\pm$ 12.11 years	

Table 3: Frequency and percentage of clinical presentations among total patients

Clinical presentation	n	%
Dyspepsia	49	43.4
Weight loss	75	66.4
Pain epigastrium	77	68.1
Anorexia	59	52.2
Early satiety	38	33.6
Postprandial vomiting	64	56.6
GI blood loss	19	16.8

Table 4: Frequency and percentage physical findings

Physical finding	n	%age
Anemia	57	50.4
Lymph nodes	13	11.5
Mass epigastrium	39	34.5

The majority of patients in our study presented with pain epigastrium, 77(68.1%) followed by weight loss which was the presenting complaint in 75(66.4%) patients. Sixty four (56.6%) patients presented with postprandial vomiting, 59(52.2%) patients with anorexia, 49(43.3%) with dyspepsia, 38(33.6%) with early satiety and 19 (16.8%) with GI blood loss (Table 3). Anemia was the most common physical finding in patients included in our study and was present in 57(50.4%) patients followed by mass epigastrium which was present in 39(34.5%) patients. Lymph nodes were palpable in 13(11.5%) patients (Table 4).

## DISCUSSION

Gastric cancer represents one of the most frequent neoplasias. Although its incidence decreased over the last few decades in industrialized countries, it still represents nowadays a major cause of death through cancer throughout the world. The main aim of this study was to know the clinical profile that is the common clinical presentation and physical findings of gastric carcinoma in patients attending a tertiary care hospital in Peshawar which could be utilized in diagnosing and formulating surveillance and management strategies of gastric carcinoma.

Men are twice as likely to get stomach cancer as women. This is borne out by our study as majority of patients were male. The male predominance demonstrated in our study was in accordance of previous studies done both nationally and internationally. As in a study done by Afridi et al<sup>9</sup> in Karachi, Durrani et al<sup>10</sup> in Rawalpindi and Eskandar et al<sup>11</sup> in Iran also demonstrated male predominance of gastric carcinoma. The male predominance shown in this study may be either because this was a hospital based study and may not be a true representative of the general population and because of general attitude in our male dominant society that female are usually ignored and not brought to the hospital for treatment or the gastric carcinoma is really male dominant in our local set up so this need large population based studies.

Gastric carcinoma usually occurs in old age group, the same happened in our study as well in which majorities of the patients were in the old age. This is also in accordance with other studies done in Pakistan, Durrani et al<sup>10</sup> and outside the country, Eskandar et al<sup>11</sup> and Vasas et al<sup>12</sup> however 22(19.5%) cases in our study have been diagnosed below 45 years, so the young patients presenting with dyspepsia not responding to treatment or with signs and symptoms suggestive of gastric carcinoma and associated with alarm features, should be screened as early as possible so that they can be diagnosed and treated in time.

Majority of patients in our set up present with history of dyspepsia of varying duration in the peripheral hospitals and are managed symptomatically until there is features of advanced gastric cancer like persistent epigastric pain, weight loss, epigastric mass and tenderness or features of gastric outlet obstruction and they are usually not in the position to be treated or in some conditions currently available therapeutic strategies remain far from optimal and these patients succumb to death<sup>13,14</sup>. In our study majority of patients presented with pain epigastrium, followed by weight loss, post prandial vomiting, anorexia, dyspepsia, early satiety and GI blood loss very late to our unit seeking treatment for their symptoms and were diagnosed in very advanced stages and majority of them were not candidate for curative treatment. Among the physical findings anaemia was the most common in our study followed by mass epigastrium and lymph nodes. This presentation of gastric carcinoma in our study is almost similar to other studies carried out in our country, Muhammad et al<sup>15</sup> and outside Pakistan.<sup>16-18</sup> This means that the presentation of gastric carcinoma is mostly the same in most parts of the world and any patients who present with signs and symptoms of gastric cancer with alarm features should be thought of gastric cancer and worked-up so that they are diagnosed and treated in time.

## CONCLUSION

Gastric carcinoma is still male predominant cancers which occur in old age with an increasing trend toward young age and present with pain epigastrium, weight loss, dyspepsia, anorexia, early satiety, anaemia and epigastric mass in majority of patients.

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