

Clinical Profile of Patients Presenting with Carcinoma Stomach in North-East District of Bangladesh

APARNA DAS,¹ MODHUSUDAN SAHA,² BIMAL CHANDRA SHIL,³ RUBINA YASMIN,⁴ GOBINDA BANIK,⁵ MAHJUBA UMME SALAM,⁶ BAHARUL MINNAT⁷

Abstract

Background: The pattern and incidence of Carcinoma Stomach vary widely in different parts of the world. Overall it is the 2nd most common cause of death but in some Asian countries, it is still the commonest cause of cancer death in patients of > 50 years.

Aim: To analyze the clinical presentation and histological findings of patients of carcinoma of the stomach.

Methods and materials: This study was done over a period of 2 years between January 2011 and December 2012. Adult patients (Age more than 18 years) of histologically confirmed as having carcinoma stomach were included in the study. Studied variables included age, gender, socioeconomic status, clinical presentations, site of lesion, histopathological subtypes. Diagnostic modalities included abdominal ultrasound, upper GI (gastrointestinal) endoscopy and endoscopic biopsy to confirm the diagnosis.

Results: Total number of patients included in this study was 150. The number of patients in <50 years age group and >50 years age group were 50 (33.33%) & 100 (66.66%) respectively. The median age at presentation was 57 years. The peak incidence was in 61-70 years age group. In our study, male: female ratio being 2.3:1. By occupation, farmer 74 (49%), housewife 37(24.6%), serviceholder 12(8%), business man 5(10%) and others 12 (8%). 71 (47.4%) patients were from lower socioeconomic group, middle 74 (49.4%), upper class 5 (3.4%) & only 63 (42%) were literate. The common clinical features were vomiting 28%, abdominal pain 18%, weight loss and anorexia 17.3%, dyspepsia 16%, Anaemia (26%), Abdominal mass 4%, Metastatic lymph node 4%, Ascites 1.3%. Lesions are involved in Cardia 14%, Body & Antrum 6.6%, Antrum 2.6%, Body 23.3%, Fundus 2% and Diffusely in 1.3% cases.

Conclusion: As regards to clinical presentation, patients in our country are presenting more with features of gastric outlet obstruction whereas abdominal lump and upper GI bleeding are more common in Western world. If gastric carcinoma is diagnosed at an early stage, patients can have a highly favorable prognosis.

Introduction

Gastric cancer (GC) is the 4th most common cancer in the world (9% of all cancers) after lung, breast and colorectal cancers. Overall it is the 2nd most common cause of death but in some Asian countries, it is still the commonest cause of cancer death in patients of > 50 years.^{1,2,3} The pattern and incidence of GC vary widely in different parts of the world. Costa Rica and Japan have the first and second

highest rates in the world with a rate of 77.5 and 50.5/100 000 persons, respectively. Although the incidence of gastric cancer in USA and western Europe over the past 50 years is dramatically declining but in most regions of Latin America and Asia, the incidence still remains very high. Annual incidence rate is still highest in Japan and China.⁴ Though there is a decreasing trend over the past few decades, gastric cancer remains a major public health problem in the world.^{5,6} Proximal stomach is the commonest site of affection in Western countries while distal stomach is more commonly affected in Asian population.^{7,8} In Asian countries the intestinal subtype of adenocarcinoma is the commonest histopathological variety.⁹ Surgery is the mainstay of treatment. Majority of the patients present with advanced disease & their prognosis is very poor despite availability of modern chemotherapeutic regimen.^{10,11}

1. Assoc. Prof. of Medicine, Dhaka Medical College
2. Assoc. Prof. of Gastroenterology. North-East Medical College, Sylhet
3. Assoc. Prof. of Gastroenterology, SSMC
4. Assoc. Prof. of Medicine. Dhaka Dental College
5. Asst. Prof. of Medicine. Dhaka Medical College
6. Assoc. Prof. of Medicine. Sylhet Women's Medical College
7. Flat No.-3B, HN-47, Road No.-5, Dhanmondi R/A, Dhaka

Correspondence: Dr. Aparna Das, Associate Professor of Medicine. Dhaka Medical College, Mob: 01914978719. E-mail: aparna_0191@yahoo.com

Objectives: The aim of the study is to observe the clinical presentation, histological findings of gastric carcinoma.

Material and Methods

This study was done over a period of 2 years between January 2011 and December 2012. Adult patients (Age more than 18 years) of histologically confirmed as having carcinoma stomach were included in the study. Studied variables included age, gender, socioeconomic status, clinical presentations, site of lesion, histopathological subtypes. Diagnostic modalities included abdominal ultrasound, upper GI (gastrointestinal) endoscopy and endoscopic biopsy to confirm the diagnosis. Blood group was done in some cases. Those patients diagnosed with peptic ulcer diseases were excluded from the study. Data were analyzed by using the standard statistical software SPSS.

Results

Total number of patients included in this study was 150. The number of patients in < 50 years age group and >50 years age group were 50 (33.33%) & 100 (66.66%) respectively. The median age at presentation was 57 years. The peak incidence was in 61-70 years age group (Figure 1). The ages of youngest & oldest patients were 21 years & 82 years respectively. In our study males were found to be more commonly affected (n=108) than females (n=42); male: female ratio being 2.3:1 (Table I). By occupation, most were farmers (49%) followed by housewives (24.6%). 74 (49.4%) patients were from middle class group and 71 (47.4%) patients were from lower socioeconomic group. Only 63 (42%) were literate. Most of the patients' blood groups were not known (56.6%). Among the known groups most evident was B+ve(15.3%) followed by O+ve (13.3%) (Table I).

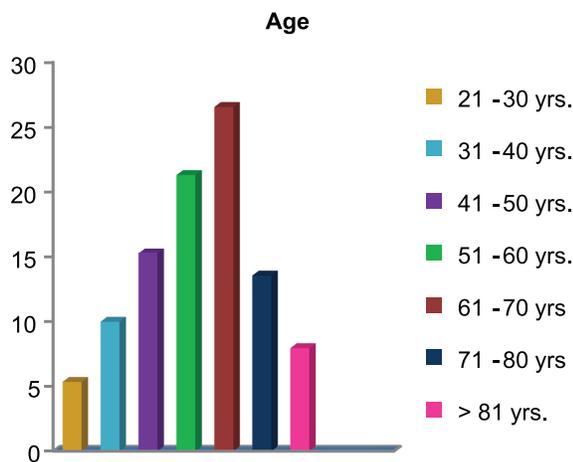


Fig.-1: Age distribution of the patients (n=150)

Table I
Characteristics of patients

	Number of patients (n=150)	Percentage (%)
Sex distribution		
• Male	108	72
• Female	42	28
Occupation		
• Farmer	74	49.4
• Service holder	12	8
• House wife	37	24.6
• Business man	15	10
• Others	12	8
Economic Status		
• Middle Class	74	49.4
• Poor	71	47.4
• Rich	5	3.4
Blood group		
• A + ve	13	8.7
• B + ve	23	15.3
• AB + ve	8	5.3
• O + ve	20	13.3
• O - ve	1	0.7
• Not known	85	56.7

The common clinical features were vomiting 28%, abdominal pain 18%, weight loss and anorexia 17.3%, dyspepsia 16%, Anaemia (26%), Abdominal mass 4%, Metastatic lymph node 4%, Ascites 1.3%. lesions are involved in Cardia 14%, Body & Antrum 6.6%, Antrum 2.6%, Body 23.3%, Fundus 2% and Diffusely in 1.3% cases.

Table II, III, IV show the clinical features, site of lesion and histological type of Ca stomach among study population respectively.

Table-II
Clinical presentation in study population (n=150)

Clinical features	No. of patient	Percentage (%)
Dyspepsia	24	16%
Vomiting	42	28%
Abdominal pain	27	18%
Anorexia & Weight loss	26	17.3%
Abdominal mass	06	4%
Anaemia	17	26%
Metastatic lymph node	6	4%
Ascites	2	1.3%

Table III*Site of lesion in study population (n=150)*

Site of lesion	No. of Patient	Percentage (%)
Cardia	21	14%
Body & Antrum	10	6.6%
Antrum	4	2.6%
Body	35	23.3%
Fundus	3	2%
Diffuse	2	1.3%

Table IV*Histological type of ca stomach in study population (n=150)*

Histological Type	No. of patient	Percentage (%)
Ademocarcinoma	148	98.6%
Lymphoma	2	1.3%

Discussion

The incidence, site, aggressiveness & prognosis of gastric cancer vary in different parts of the world. Worldwide gastric cancer is seen mostly after 50 years of age.¹²⁻¹⁴ In our study also the incidence was 66.66% in > 50 years age group. Incidence in < 50 years age group was 33%; the peak incidence was in 55-65 years age group. Some literatures have quoted an incidence of around 14.8% in <50 years age group.^{1,2,12} Male: female ratio in some published series is 2:1 and almost similar incidence was found in our study (2.33:1) as well. Qurieshi MA et al showed the male to female ratio of carcinoma stomach in Kashmir, a northern state in India of 3.3:1 and the average age of male patients was 61 years but in females it was 63 years, slightly higher than that of males.¹⁵

Some studies from underdeveloped countries show that incidence of gastric cancer is more in lower socioeconomic & illiterate population and this was correlated with higher incidence of H. Pylori infection.¹⁶⁻¹⁸ Our study also shows that 55.33% patients are from low socioeconomic group & 58% are illiterate.

The symptoms of GC are non-specific and vague, when symptomatic patients experience epigastric pain and discomfort and definitive symptoms such as weight loss or obstructive symptoms and metastases that often impede curative radical resection. In a review of 18,365 patients performed by the American College of Surgeons the common presentation of carcinoma stomach were weight loss in 66.6%, abdominal pain in 51.6%, nausea/vomiting in 34.3%, anorexia

in 32%, dysphagia in 26.1%, melaena in 20.2% and early satiety in 17.5% patients¹⁹. Qurieshi MA et al showed 35% patients reported weight loss, 76.5% had dyspepsia, 35.8% had anorexia and vomiting. On physical examination anemia was found in 26%, ascites in 3% and epigastric mass in 4% cases.¹⁵ Gastric outlet obstruction and distant metastasis were commoner presentations than western world in our study, in contrast to which upper GI bleeding and abdominal lump were more common presentations in Western countries.

In a survey in Khuzestan, common presentations were weight loss & abdominal pain.²⁰ In our study, common presentations, irrespective of age & sex, were vomiting (28%) & abdominal pain (18%). In Western countries and Japan, patients with early gastric carcinoma are detected more than our country due to routine upper GI endoscopy screening program which is lacking in our country.

In Asian countries distal gastric cancer is more common.^{21,22} In our study distal site (45%) was the most common site of the lesion and the proximal stomach was the least common site of involvement which is similar to the result of most Asian studies including those from Indian subcontinent. Incidence of proximal gastric cancer is increasing (presently 50%) & that in distal stomach is decreasing (presently 41%) in Western countries.^{23,24} Satti MB et al also showed the majority of carcinoma occurred in the antrum (60%).²⁵ A recent study from the southern state of Kerala in India showed that carcinoma of the distal stomach has remained predominant although a trend towards a proximal shift has been noted. But Cherian JV et al showed no change in the site specificities of the carcinoma of the stomach in south Indian population.²⁶ Qurieshi MA et al showed the site of growth among the Kashmiri patients at proximal stomach in 42%, distal stomach in 45.7%, at mid stomach and diffuse throughout the stomach in 6.2% each.¹⁵ Afridi SP et al reported in the study conducted in Pakistan that growth was found at the cardiac end in 33%, at pylorus and antrum in 40%, linitus plastica in 13.3% patients, only body and body and pylorus were involved in 6.7% each. We found the commonest histological type to be adenocarcinoma (98%).²⁷ This is also supported by some reports. Western series also quote similar data.

Conclusion

The incidence of gastric carcinoma in patients younger than 50 years was more common than Western world. Patients are presenting more with lesions in the distal stomach in our country than the Western world. As regards to clinical presentation, patients in our country are presenting more

with features of gastric outlet obstruction whereas abdominal lump and upper GI bleeding are more common in Western world. If GC is diagnosed at an early stage, patients can have a highly favorable prognosis and avoid extended surgery, which may produce complications, especially in the elderly people. Our study has some obvious drawbacks like short period of study and small sample size. One large volume study will be required to draw an appropriate and accurate conclusion.

Conflict of Interest: None

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