Study of Location and Staging of Tumours in Patients of Gastric Carcinoma at a Tertiary Hospital

Avinash Rinait 1, Yashwant Lamtare R 1,*, Pulavarty Prateek 2, Dilip Gode 1

1 Department of Surgery Datta Meghe medical college Nagpur, Shalinitai Meghe Hospital and Research Centre, Nagpur-441110
2 Department of Surgery Jawaharlal Nehru medical college, Datta Meghe Institute of Medical Sciences, Wardha-442001

ABSTRACT

Cancer is also known as the captain of death for humanity. It ranks second only after heart disease leading to death worldwide. In India, the incidence of gastric cancer is considered low and variable in different parts of the world. Gastric carcinoma plays an essential role in determining its management also its location gives some idea about the etiopathogenesis; hence this study was undertaken to study the situation and staging of tumours in patients of gastric carcinoma. This was a prospective study in which 50 patients of gastric adenocarcinoma admitted in the department of surgery at a tertiary hospital were studied. Out of 50 patients studied, 36 were males, and 14 were females. Even though the mean age for male patients is slightly higher than female patients (62 versus 60), the most common location of the tumour was the antrum (88%) followed by the cardia (6%) while the body had just 4% of the tumours and 2% of the tumours were diffused. The most common stage for tumours was stage II (88%), followed by stage III (12%). There were no tumours in stage 1 and IV. Most patients were males who presented in early-stage II with antrum being the most common location of the tumour.

INTRODUCTION

Gastric malignancy (GM) is the fifth common cancer in men and seventh in women in India (Rastogi et al., 2004). Cancer is also known as the captain of death for humanity. It ranks second only after heart disease leading to death worldwide. In India, the incidence of gastric cancer is considered low and variable in different parts of the world and among races. The frequency of gastric cancer in northeastern is higher than in other parts of India (Parkin et al., 2002).

In India, the affected age group falls younger in the south than the north. More common in males than females with the age ratio of 2.4:1. (Black et al., 1997)

Symptoms usually develop at a late stage, and the incidence of advanced GM (Stage IV) is 20-30%. Median survival in Stage IV cancer is up to 9 months with no long-term survival (Jemal et al., 2011), even in patients treated with an aggressive approach (intraperitoneal chemotherapy or cytoreductive surgery (CRS) followed by intraperitoneal chemotherapy). Shahida Parveen Afridi et al (Afridi and Bano, 2011) reveal in their study that carcinoma located at the body(diffuse)and cardiac end have a poor prognosis as presentations of the disease were usually at an advanced stage.
Hence this study was conducted to know the pattern of stomach cancer about the location of tumour and staging.

All patients underwent a detailed medical history and clinical examination.

The clinical examination comprises of general examination, systemic examination, and digital rectal examination—diagnosis of patients based on UGI Endoscopy and biopsy with appropriate imaging. Assessment for H. Pylori was done. Staging based on the TNM classification system was done.

Statistical Analysis
The frequency represented all categorical data with percentage, and it was analyzed by using SPSS 16.0 version.

RESULTS
A total of 50 patients who underwent surgery for histologically proven gastric adenocarcinoma was studied out of which 36 were males, and 14 were females. Even though the mean age for male patients is slightly higher than female patients (62 versus 60).

The most common location of the tumour was the antrum (88%) followed by the cardia (6%), while the body had just 4% of the tumours and 2% of the tumours, was diffuse.

The most common stage for tumours was stage II (88%), followed by stage III (12%). There were no tumours in stage 1.

DISCUSSION
A total of 50 patients have studied out of which a majority of cases of gastric cancer are adenocarcinomas that have a peak incidence between ages 50 and 70 yr. In our study population, the mean age of patients with gastric cancer is approximately 60-62 years and females outnumber than males (see Figure 1).

Lichtenstein et al (Lichtenstein et al., 2000) and Maehara et al. (Maehara et al., 2001) in their studies found out that Gastric cancer is twice more common in men and its incidence increases with age, having a peak in the sixth and seventh decade of life.

The site of gastric cancer can be at cardia or pyloric antrum. Cardiac end cancer more common in develop countries, and antral malignancies affect peoples of the underdeveloped world (Kadashetti et al., 2017). Environmental factors like food and Helicobacter pylori (H. pylori) infection are common factors in developing countries (Lamture et al., 2017). Obesity and reflux are factors responsible for...
cardiac end cancer in developed countries. But in Japan, antral tumours remain still more prevalent. In India also distal gastric cancer is more common than proximal gastric cancer (Jemal et al., 2011). In the present study, most of the tumours are in the distal part of the stomach (see Figure 2).

In Table 1 shows the most common stage for tumours was stage II (88%) followed by stage III (12%). There were no tumours in stage 1. Theuer CP et al. (Theuer et al., 1996) found in his study that most of the patients were having an age range of less than 40 years. The stage of the disease was advanced with poor prognosis was observed. Nakamura T et al (Nakamura et al., 1999) reveals that females are more common in young patients. This is an opposite finding to the present study. This group was associated with an adverse prognosis with either proximal or diffuse in a location with advanced stage vice versa in an older population.

It is vital to promote the early detection of cancer to decrease morbidity & mortality in India (Sahu et al., 2017; Bagri-Manjrekar et al., 2018). In this study, most of the patients came to the hospital at stage II & III and underwent surgery.

**CONCLUSIONS**

Gastric cancer is more common in males than females and location were in antrum with most cases presenting to the hospital in stage II. Presentations of gastric cancer differ significantly between young and older populations. Early detection is the key to improve survival.

**Conflict of Interest**

None.

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