



A RETROSPECTIVE STUDY ON CLINICAL AND HISTOLOGICAL SPECTRUM OF ESOPHAGOGASTRIC JUNCTION CANCERS IN A MEDICAL COLLEGE HOSPITAL, SOUTH INDIA.

General Medicine

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ABSTRACT

Background: The incidence of gastroesophageal junction cancers has increased in recent decades, in addition to a rise in incidence of esophageal cancers. The increased prevalence of GERD and obesity currently contribute to increased incidence of these tumors. **Aim:** To study the clinical symptoms, endoscopy lesion types and histopathology of Esophago gastric junction tumours seen in our tertiary care hospital. **Materials and methods:** A Retrospective study of duration of 4 years from December 2018 to December 2022. All the patients were subjected for symptom analysis, clinical examination, basic haematological workup, Upper GI endoscopy and HPE. **Results** Out of the 60 patients, males were 38 (73%) and females were 14 (27%). The symptom presentations were dysphagia 46 (88%), abdominal pain 24 (46%), abdominal distension 5 (9%), loss of appetite 40 (76%), loss of weight 36 (70%), retrosternal chest pain 12 (23%), UGI bleed 3 (5%). UGI endoscopy showed polypoidal form 8 (15%), ulcerated 26 (50%), stricturous 12 (23%), flat 6 (12%). Siewert 1 type 1-13 (25%), Siewert type 2-10 (19%), Siewert type 3-29 (56%). HPE analysis showed adenocarcinoma in 40 patients (76%) and squamous cell carcinoma in 12 patients (24%). **Conclusions:** This study demonstrates that oesophagogastric junction tumours are more prevalent in males. Siewert Type 3 accounted for majority of the tumours. Adenocarcinoma was most common histological type.

KEYWORDS

Esophagogastric cancer, symptoms, endoscopy, Siewert, Adeno carcinoma.

INTRODUCTION

The incidence of gastroesophageal junction cancers has increased in recent decades, in addition to a rise in the incidence of Esophageal cancers. GERD, obesity, smoking, alcohol consumption, and low *Helicobacter pylori* (HP) infection are major risk factors for such cancers. Among these risk factors, the increased prevalence of GERD and obesity currently contribute to increased incidence.

The gastroesophageal junction (GEJ) forms the border between the distal esophagus and the proximal stomach and is normally where squamous epithelium of the esophagus transitions into columnar epithelium. This zone is vulnerable to gastric acid reflux and consequently has an increased risk of malignant transformation[

Siewert described three types of EGJ tumors based on relationship of epicenter of the tumor and the endoscopic location of the Z line (i.e. squamo columnar junction):

MATERIALS AND METHODS

A total number of 52 patients who were outpatients and inpatients in Department of General Medicine, Aarupadai Veedu Medical college and hospital, were taken up for study. It was a retrospective study of duration of 4 years from December 2018 To December 2022. All the patients were subjected for symptom analysis, clinical examination, basic haematological workup, Upper GI endoscopy and HPE of endoscopic lesions.

RESULTS

A total of 52 patients were enrolled in the study after clinical assessment and upper GI endoscopy showing evidence of malignant lesions at Oesophago gastric junction.

Table 1- Age and Sex distribution

Age group	Male	Female
30 to 40	1	1
40 to 50	3	1
50 to 60	7	3
60 to 70	18	6
70 to 80	6	2
> 80	3	1

The age group of study was 30 to 85 years. The most common age group was 60 to 70 years. The youngest patient was 38 years old and oldest patient was 84 years. Out of 52 patients, males were 38 (73%) and females were 14 (27%). The male to female ratio was 2.7 to 1.

The symptom presentations were dysphagia in 46 (88%), abdominal pain in 24 (46%), abdominal distension in 5 (9%), loss of appetite in 40 (76%), loss of weight in 36 (70%), retrosternal chest pain in 12 (23%), UGI bleed in 3 (5%).

The most common symptoms were dysphagia, loss of weight and appetite. 5 patients presented with ascites and 3 patients when evaluated for upper GI bleed had OG junction tumor.

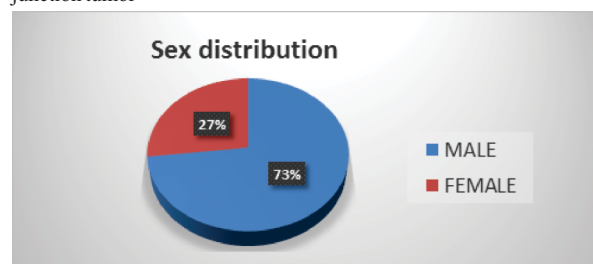


Figure 1 – Sex Distribution

Table 2 – Baseline Analysis of GI and constitutional Symptoms

Symptoms	N (%)
Dysphagia	46 (88%)
Abdominal pain	24 (46%)
Abdominal distension	5 (09%)
Loss of appetite	40 (76%)
Loss of weight	36 (70%)
Retrosternal chest pain	12 (23%)

The UGI endoscopy lesion at OG junction showed polypoidal form in 8 (15%), ulcerated lesions in 26 (50%), stricturous / stenosing in 12 (23%), Flat lesions in 5 patients (12%). The ulcerated lesions were common and flat lesions in endoscopy was the least.

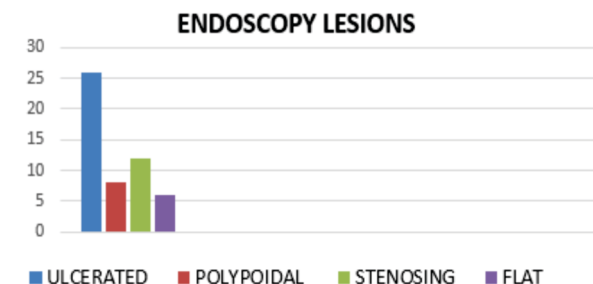
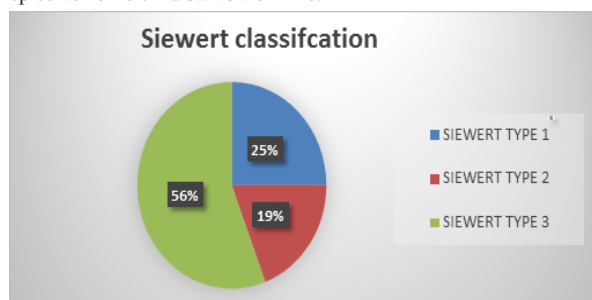


Figure – 2 Endoscopic Lesions Types

Siewert described three types: type I (distal esophageal tumors) when the epicenter is 1-5 cm above Z line, type II (true EGJ tumors) from 1

over to 2 cm below the Z line, and type III (subcardial tumors) when the epicenter is 2-5 cm distal to the Z line.



Figure–3 Siewert classification of OG junction tumors

According to Siewert classification, endoscopic lesions at OG junction were divided into Siewert type 1 -13 (25%) ,Siewert type 2-10 (19%), Siewert type 3 –29(56%)'. HPE analysis showed adenocarcinoma in 40 patients (76%) and squamous cell carcinoma in 12 Patients (24%).



Figure–4 Histopathological types Of OG junction tumors

CONCLUSIONS

This study demonstrates that oesophagogastric junction tumours are more prevalent in males. The most common symptoms are dysphagia associated with weight loss and loss of appetite. The ulcerated lesions are common endoscopy. lesions. Siewert Type 3 accounted for majority of the tumours. Adenocarcinoma was the most common histological type.

REFERENCES

1. Rüdiger Siewert, J. et al. "Adenocarcinoma of the Esophagogastric Junction: " *Annals of Surgery* 232.3 (2000)
2. *Annals of oncology* , 2010 Trends in oesophago-gastric cancer incidence in Spain: analysis by subsite and histology
3. Gertler, R.; Stein, H.J.; Loos,,How to classify adenocarcinomas of the esophago gastric junction: As esophageal or gastric cancer? *Am. J. Surg. Pathol.* **2011**,
4. Brown, L.M.;, S.S.; Chow, W.-H. Incidence of Adenocarcinoma of the Esophagus Among White Americans by Sex, Stage, and Age. *J. Natl. Cancer Inst.* **2008**,
5. Rusch, V.W. Are cancers of the esophagus, gastroesophageal junction, and cardia one disease, two, or several? *Semin. Oncol.* **2004**, *31*,
6. Obermannová, R.; Alsina,, Oesophageal cancer: ESMO Clinical Practice Guideline for diagnosis, treatment and follow-up. *Ann. Oncol.* **2022**, *33*, 992–1004.
7. Siewert, J.R.; Stein, H.J. Classification of adenocarcinoma of the oesophagogastric junction. *Br. J. Surg.* **1998**, *85*, 1457–1459]
8. Rusch V.W. Are cancers of the esophagus, gastroesophageal junction, and cardia one disease, two, or several? *Semin Oncol.* 2004;31: 444-449.