



Evaluation of Epigastric Pain in Our Study Group

Authors

Dr P.Ravi Sankar, Dr T.Vinodh Kannan, Dr A. Anvar Ali, Dr K.V. Shakthi Saravanan

Department of General Surgery, Rajah Muthiah Medical College, Chidambaram

Abstract

Aim and Objectives: *the objective of this study is to determine the prevalence of epigastric pain in our study population. To detect the commonest age group presented with epigastric pain. To determine the commonest cause of epigastric pain in our study population.*

Materials and Methods: *A prospective study of 500 patients presented with epigastric pain came to general surgery OPD, Rajah Muthiah Medical College, Annamalai University, Chidambaram between 2016 to September 2018. Patients are subjected to upper GI scopy and results are analysed.*

Results: *Among 500 patients with epigastric pain, normal study of upper gastrointestinal tract was found in 217 subjects forming 48.4% of total study group. Out of 500 subjects, 266 males forming 53.2% present with epigastric pain. Among 500 patients, with epigastric pain, 28% belongs to 36-45yrs age group. The prevalence of epigastric pain in this study is 21.2%, 16%, 14.8% in the age frequencies of 46-55, 26-35, 56-65 age groups respectively.*

Conclusion: *Prevalence of significant findings in upper gastrointestinal evaluation of patients with epigastric pain by endoscopy is relatively higher than the prevalence of normal finding. Prevalence of patients with epigastric pain is modestly higher in male population compared to females. UGI scopy has a vital role in initial evaluation and investigation of patients with epigastric pain.*

Keywords: *Epigastric pain, UGI scopy.*

Back Ground

Epigastric pain - pain in the mid-upper abdomen. The differential diagnosis of epigastric pain is broad. Pain in this epigastric region can be due to esophagitis, gastritis, peptic ulcer disease, pancreatitis, cholelithiasis, cholecystitis. So causes other than upper gastrointestinal tract are ruled out doing ultrasound abdomen.

Introduction

Flexible endoscopy is the gold standard investigation of the upper gastrointestinal tract. The original flexible endoscopes are fiberoptic but

now most use a solid state camera mounted at the instrument's tip. Flexibe endoscopy is more sensitive than conventional radiology in the assessment of the majority of gastroduodenal conditions. This is particularly the case for peptic ulcer, gastritis and duodenitis. In most instances, it is the only investigation required.⁽¹⁾

Flexible endoscope come in a variety of diameter and lengths, either direct viewing or video. The primary endoscope used for upper GI endoscopy is a zero degree, forward viwing endoscope, where as duodenoscope visualizes the GI tract at 90 to the shaft. Side viewing endoscope is

primarily used in duodenum to visualize the ampulla of Vater, but they may also be used in the stomach.

The shaft of the endoscope is flexible, especially at the distal tip, which has deflection capabilities ranging from 90-240 in the up/down position and 100 in the right/left directions.

The controls for maneuvering the deflection tip are located on the control head with a large inner knob producing up or down and smaller outer knob producing a left or right deflection. Two depressable buttons are located adjacent to these deflection knobs. When pressed the top button produces suction and lower button serves two additional functions like air insufflation produced by simple placement of finger over the button without applying pressure and when pressed, small amount of water released for cleaning the tip during examination.⁽²⁾

Biopsy forceps, cytology brushes or other diagnostic instruments are passed through the accessory channel. The flexible endoscope is connected to a light source that is either 300W Xenon arc lamp or a halogen-tungsten lamp. In addition, air, water pumps and irrigation are connected to the endoscope via light source and controlled using the control buttons. If a video monitor is being used, this is also connected to the endoscope through the light source.

Proper hand positioning and manipulation of the flexible endoscope is key to perform an efficient examination. Most endoscopists will hold the control head of the endoscope in the left hand, with thumb on the up/down knob and the index and middle finger on the suction and air/water button. The thumb and index finger are then used to control the deflection tip during examination. The right hand of the endoscopist is used to hold the flexible shaft for insertion, withdraw and rotation during the examination.

Fibreoptic endoscopy is generally safe investigation, but it is important that all personnel undertaking these procedures are adequately trained and the resuscitation facilities are always available. Careless and rough handling of the

endoscope during intubation of the patient may result in perforation of the pharynx and oesophagus, stomach, duodenum. An inadequately performed endoscopy is also dangerous as a serious condition like early and curable gastric cancer may be overlooked and missed by inexperienced endoscopists. Spraying mucosa with dye endoscopically may allow better discrimination between and abnormal mucosa, so allowing a small cancer to be more easily seen. In the future, advances in technology may allow 'optical biopsy' to determine the nature of mucosal abnormalities.

Upper gastrointestinal endoscopy can be performed without sedation, but when required incremental doses of benzodiazepine are usually administered. It has now become standard to use pulse oximetry to monitor patients during upper gastrointestinal endoscopy. Buscopan is useful to abolish duodenal motility for examination of the second and third parts of duodenum. Examination of this type are best carried out using a side viewing endoscope such as is used for endoscopic retrograde cholangiopancreatography (ERCP).

Aim and Objectives

The objective of this study is to determine the prevalence of epigastric pain in our study population. To detect the commonest age group presented with epigastric pain. To determine the commonest cause of epigastric pain in our study population.

Materials and Methods

A prospective study of 500 patients presented with epigastric pain came to general surgery OPD, Rajah Muthiah Medical College, Annamalai University, Chidambaram between 2016 to September 2018. Patients are subjected to upper GI scopy and results are analysed.

Inclusion Criteria

- Patients of ages above 12yrs with complaints of epigastric pain
- Patients of both sexes

Exclusion Criteria

- Patients of age below 12 yrs
- Patients with abdominal pain confirmed by USG to have pathologies like cholecystitis, pancreatitis, hepatitis
- Post operative patients

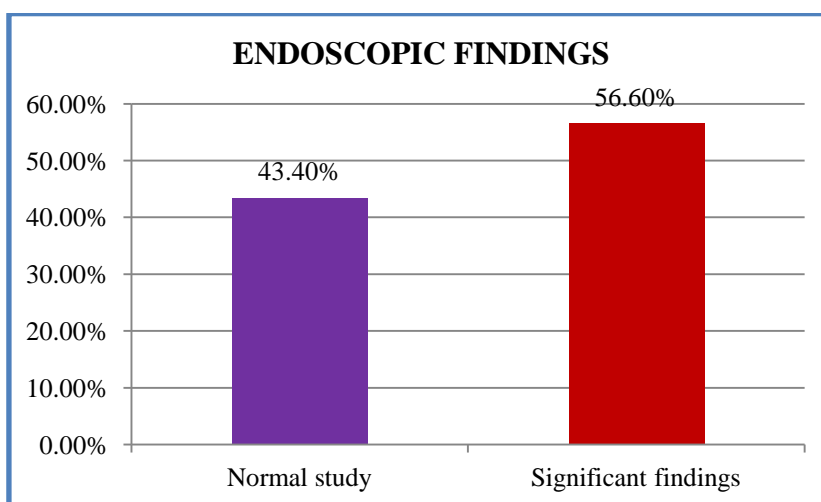
Discussion

Patients presented with epigastric pain, their age, sex and endoscopic findings are recorded. The

prevalence of epigastric pain among different age groups and both the sexes are derived from data collected. The prevalence of all significant lesions in endoscopy are derived and their age and sex distribution is charted out. All the data tables and interpretation are presented here.

Out of 500 patients with epigastric pain normal study of upper gastrointestinal tract was found in 217 patients forming 43.4% of total population.

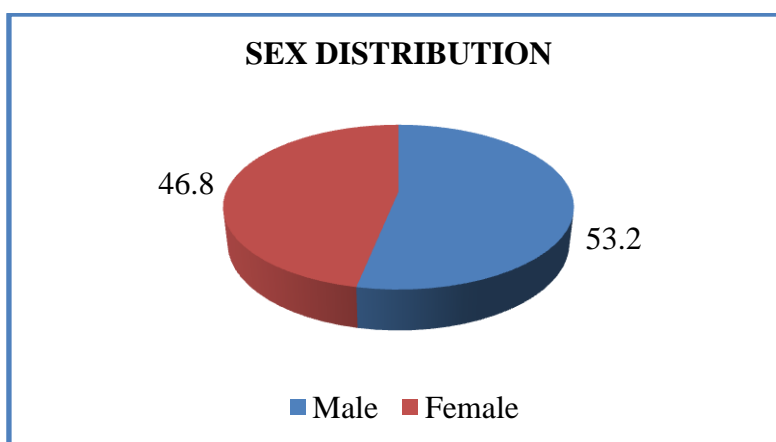
Endoscopic findings	No. of subjects	Percentage
Normal study	217	43.4
Significant findings	283	56.6



Out of 500 patients, 283 patients showed significant endoscopic findings

Sex Distribution

Sex	No. of subjects	Percentage
Male	266	53.2
Female	234	46.8

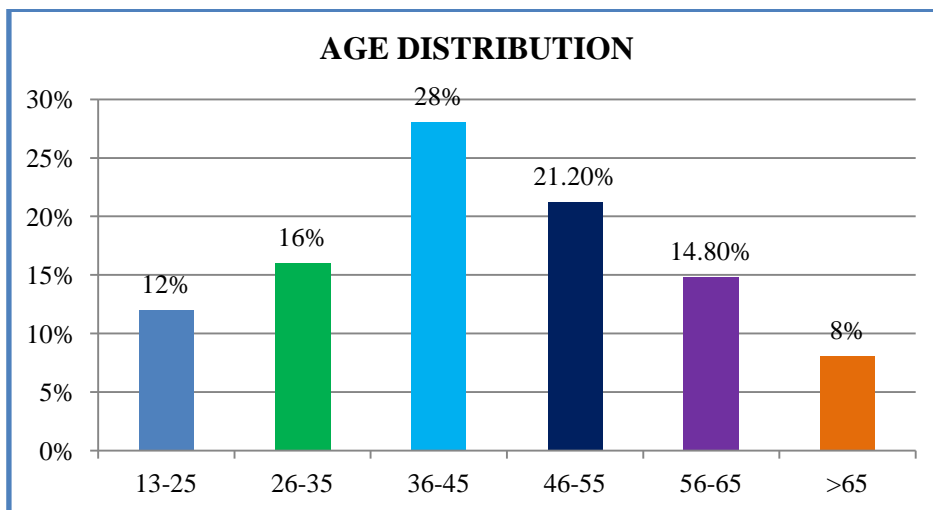


Prevalence of patients presented with epigastric pain is moderately higher in male compared to

females. Out of 500 patients 266 patients are male forming 53.2% presents with epigastric pain

Age Distribution

Age(year)	No. of subjects	Percentage
13-25	60	12
26-35	80	16
36-45	140	28
46-55	106	21.2
56-65	74	14.8
>65	40	8

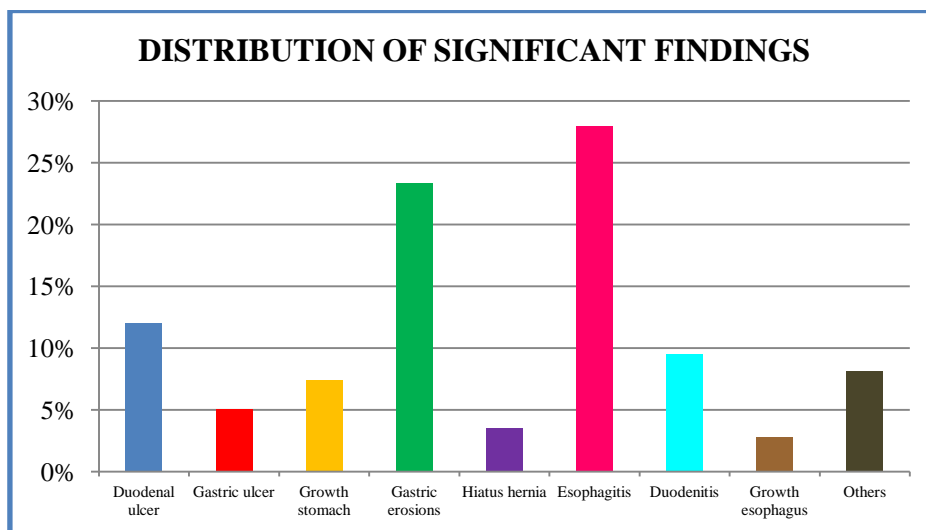


The prevalence of patients presented with epigastric pain in this study is 28% belongs to 36-45yrs age group, 21.2%,16%,14.8% in the age

frequencies of 46-55, 26-35,56-65age groups respectively

Distribution of Significant Findings

Endoscopic findings	No. of subjects	Percentage
Duodenal ulcer	34	12
Gastric ulcer	15	5
Growth stomach	21	7.4
Gastric erosions	66	23.3
Hiatus hernia	10	3.5
Esophagitis	79	27.9
Duodenitis	27	9.5
Growth esophagus	8	2.8
Others	23	8.1



Among various endoscopic significant findings, esophagitis and gastric erosions forms 27.9% and 23.3% of entire study population and becomes the commonest cause of epigastric pain in this study

Conclusions

Prevalence of significant findings in upper gastrointestinal evaluation of patients presented with epigastric pain by endoscopy is relatively higher than prevalence of normal findings. Prevalence of epigastric pain is moderately higher in male population compared to females. Thus upper gastrointestinal scopy has a vital role in the initial evaluation and investigation of patients with epigastric pain

References

1. Bailey and Love, 27th Edition
2. Hirschowitz BI, Curtiss LE, Peters CW, et al, Demonstration of a new gastroscope. The "fibroscope"