

An Original Article - A Clinico Pathological Study of Upper Gastro Intestinal Endoscopy in Patients with Dyspepsia

Dr. S. R. Kulkarni¹, Dr. Ujwal Kumar², Dr. Karan Singhla³

¹(M.S) General Surgery Professor & Head Surgery Kims, Karad, Maharashtra, India

²MBBS; Resident, Department of Gen Surgery, Kims Karad, Maharashtra, India

³MBBS; Resident, Department of Gen Surgery, Kims Karad, Maharashtra, India

Abstract: *Aims: The outcome of upper GI endoscopy in dyspeptic patients. The co-relation of alarm symptoms with endoscopy finding. Methods: A total of 120 dyspeptic patients attending surgery OPD of Krishna Hospital, Karad were selected. The case series study was conducted over a period of one and half years. Patient who were willing were subjected to upper GI endoscopy after informed written consent. The endoscopies were performed as per standard protocol and biopsies were taken from suspicious lesions. Observations: age wise distribution of various subject with their specific presentations were observed. Association of alarm symptoms with malignancy was seen. Conclusion: Upper GI endoscopy is a useful diagnostic modality. Dyspepsia is common in male patients than in female; it is more common in age group of 25-55 years of age. The common abnormal endoscopic findings included gastritis, oesophagitis, and duodenitis. Dyspepsia with alarm symptoms increases the risk of malignancy whereas in dyspepsia without alarm symptoms there is reduced risk of malignancy. Alcohol and smoking being major risk factor for dyspepsia. Upper GI endoscopy is a useful diagnostic modality in elucidation of the causes of dyspepsia.*

Keywords: a study of upper g. i endoscopy in patients with dyspepsia

1. Introduction

Dyspepsia is constellation of symptoms, frequently related to food and includes nausea, bloating sensation, epigastric burning sensation, pain, discomfort, indigestion. Dyspepsia affects 1/4th of the population of the industrialized countries. Rome 3 criteria defines dyspepsia as one or more symptom such as post prandial fullness, early satiety, epigastric pain or discomfort lasting for at least 4 weeks. Dyspepsia sub type includes reflux like, ulcer like, dysmotility like. Dyspepsia with alarm features are associated with gastrointestinal disease such as benign disease like oesophagitis, gastritis, duodenitis, peptic ulcer and gastric malignancies. Alarm features for patient with dyspepsia include age > 50 yrs, new onset symptoms, sudden weight loss, GI bleed, progressive dysphagia, persistent vomiting, jaundice, mass epigastrium. Upper GI endoscopy is gold standard for diagnosing disease in patient with dyspepsia and is investigation of choice when radiological investigations are negative. Negative endoscopy reduces patient's anxiety and increases satisfaction. Endoscopy helps in early detection and treatment at initial stage of various diseases and thus has better patient outcome. This study is intended to know the profile of upper GI endoscopy findings in dyspeptic patients and look for association of alarm symptoms which helps in early treatment, thereby reducing morbidity and mortality rate.

2. Materials and Methods

A total of 120 dyspeptic patients attending surgery opd of KRISHNA HOSPITAL, KARAD were selected. The case series study was conducted over a period of one and half years. Patient who were willing were subjected to upper GI

endoscopy after informed written consent. The endoscopies were performed as per standard protocol and biopsies were taken from suspicious lesions.

Inclusion Criteria:

1. All patients with dyspeptic symptoms, age group of 18 years and above.
2. Patient with alarm symptoms.
3. Patient with previously diagnosed and treated cases of gastric ulcer, duodenal ulcer complicated peptic ulcer, coming with dyspeptic symptoms

Exclusion Criteria:

1. Patients who are endoscopy negative but have dyspepsia may have other diagnosed disorders.
2. Individuals who had an endoscopy indications other than dyspepsia.
3. Not willing for endoscopy.
4. Age group below 18 years.

Statistical Analysis:

The data was entered in Excel sheet with coding and the same reference.

3. Observations and Results

The study of 120 patients who presented with dyspepsia, were taken up for upper GI endoscopy as an initial diagnostic evaluation tool during November 2013 to June 2015. Following were the observations obtained.

Table 1: Distribution of patients according to gender

Sex	No of samples	% of samples
Male	81	67.50
Female	39	32.50
Total	120	100.00

In our study there are 120 patients of them 81 are males and 39 are females.

Table 2: Age wise distribution of patients

Age groups	No of samples	% of samples
<=25yrs	11	9.17
26-35yrs	25	20.83
36-45yrs	13	10.83
46-55yrs	30	25.00
56-65yrs	24	20.00
>=66yrs	17	14.17
Total	120	100.00
Mean age	47.93	
SD age	15.80	

Table 3: Distribution of patients according to site of endoscopic findings

Site of endoscopic findings	Number	%
esophagus only	26	21.67%
stomach only	40	33.33%
Duodenum	15	12.5%
Esophagus and stomach	5	4.16%
Stomach and duodenum	4	3.33%
Esophagus and duodenum	4	3.33%
Esophagus and stomach and duodenum	2	1.67%
Normal study	24	20%
Total	120	100

Table 4: Distribution of patients according to alarm symptoms

Alarm symptoms	Present	%	Absent	%	Total
Weight loss	12	10.00	108	90.00	120
Gastrointestinal bleeding	18	15.00	102	85.00	120
Vomiting	49	40.83	71	59.17	120
Dysphagia	6	5.00	114	95.00	120
Odynophagia	1	0.83	119	99.17	120
Jaundice	2	1.67	118	98.33	120

Table 5: Distribution of patients according clinical and endoscopic finding in different organ

	No of subjects	% of subjects
Tenderness		
Present	117	97.50
Absent	3	2.50
Mass epigastrium		
Present	6	5.00
Absent	114	95.00
Gastritis		
Present	42	35.00
Absent	78	65.00
Oesophagitis		
Present	25	20.83
Absent	95	79.17
Duodenitis		
Present	17	14.17
Absent	103	85.83
Peptic ulcer		
Present	3	2.50
Absent	117	97.50
Duodenal ulcer		
Present	3	2.50
Absent	117	97.50
Carcinoma oesophagus		
Present	9	7.50

Absent	111	92.50
Carcinoma stomach.		
Present	4	3.33
Absent	116	96.67
Carcinoma periampullary.		
Present	2	1.67
Absent	118	98.33
Total	120	100.00

Table 6: Habits associated in patients with dyspepsia

Personal History	Present	%	Absent	%	Total
Alcohol	76	63.33	44	36.66	120
Smoking	69	59.50	51	42.50	120
Pan chewing	71	59.16	49	40.84	120

Table 7: Distribution of patient according to alarm symptoms

	Normal	Benign	Malignant	Total
Dyspepsia with alarm sym.	27	14	13	54
Dyspepsia without alarm sym.	63	1	2	66

Table 8: Distribution of patients according to age with biopsy status

BIOPSY	AGE<50	>50
Normal	63	27
Benign	9	6
malignant	7	8

4. Discussion

The study “A clinico pathological study of upper GI endoscopy in dyspeptic patients” was undertaken at Krishna hospital, Karad, to know the endoscopic findings of dyspepsia and its co –relation with alarm symptoms. Most patients were in the age group of (25-55)yrs. Mean age was found to be 47.93 years. Comparison with other studies showed similar findings.

Sl .No	Name of study	Mean age in years
1	Thomson A B R et al ³¹	45.9
2	Ziauddin ³²	42.2+- 15.7
3	Choomsri p et al ³³	41
4	Present study	47.93

Endoscopic findings:

gastritis (35%)
 oesophagitis (20.8%)
 duodenitis (14.2%).
 Carcinoma oesophagus (7.5%)

Sl. No	Name of study	Gastritis
1	Sarwar et al ³⁴	13%
2	Ziauddin ³²	18%
3	Present study	35%

Gastric Malignancy

Carcinoma Oesophagus -7.50%
 Carcinoma Stomach-3.3%
 Periampullary Carcinoma-1.67%

Incidences of gastric malignancies observed by various author

Sl. No	Name of study	Percentage of gastric malignancy
1	Choomsri p et al ³³	1%
2	Khan N et al ³⁵	3%
3	Ziauddin ³²	4%
4	Present study	3.33%

Comparison of endoscopic findings and its association in patients with dyspepsia

Groups	Findings	Sumathi et al ⁴	Present study
Dyspepsia without alarm	Normal	1223	63
	Benign	1415	1
	Malignant	125	2
Dyspepsia with alarm	Normal	77	27
	Benign	97	14
	Malignant	48	13

5. Conclusion

Dyspepsia is a common symptom of upper GI disorder. Upper GI endoscopy is a useful diagnostic modality. Dyspepsia is common in male patients than in female; it is more common in age group of 25-55 years of age. The common abnormal endoscopic findings included gastritis, oesophagitis, and duodenitis. Dyspepsia with alarm symptoms increases the risk of malignancy whereas in dyspepsia without alarm symptoms there is reduced risk of malignancy. Alcohol and smoking being major risk factor for dyspepsia. Upper GI endoscopy is a useful diagnostic modality in elucidation of the causes of dyspepsia.

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