

Original Article

Gastrointestinal Tract Disorders Among In Patients at Khwaja Yunus Ali Medical College Hospital

Ali MZ¹, Iqbal SM², Ali SMK³, Hossain B⁴, Shahjahan D⁵

Abstract

Gastrointestinal tract disorders are a public health problem in our country. The objective of this study was to find out hospital based information and risk factors of prevalence of the patients suffering from gastrointestinal disorders. We included all suffering from upper abdominal pain and visiting KYAMCH, A total number of 1196 patients were endoscopically examined. Among them 25.54% were found to be suffering from upper gastrointestinal tract disorders, 9.86% had erosion, 8.01% had ulcer, 3.62% had inflammation and 4.04% was found to be malignant. Duodenum Ulcer Disease among male 4% and in females 3%. The prevalence of gastrointestinal disorders in a tertiary level hospital in rural Bangladesh is increasing.

Keywords: Peptic Ulcer, Erosion, Inflammation, Malignancy, Proton Pump Inhibitors (PPIs)

Introduction

Peptic Ulcer disease is commonly seen in clinical practice in Bangladeshi population. But most of the patients believe that GASTRIC or upper abdominal pain quickly relieved by antacids or Proton pump inhibitors (PPIs) is GI disorder. The prevalence of DUD and GUD to be 11.98% and 3.58% respectively¹. In the same study duodenal ulcer dyspepsia in the first degree relatives of subjects were found to be significantly higher.

The lifetime risk for developing a peptic ulcer is approximately 10%. Studies on epidemiology, clinical presentation, gastric acid secretion and relationship to spice intake of peptic ulcer have been carried out in

Bangladeshi population. It has been claimed that ulcers in duodenum and stomach are common manifestations of heterogeneous etiologic factors and pathogenic mechanisms, geographic and socio economic specificities. It is not unexpected that the prevalence rates of ulcer diseases vary in different populations². Prevalence study on PUD in a defined population in Bangladesh has only recently been reported. Evaluation of clinical symptoms and signs of these diseases in a defined population may serve as a useful guide for clinical diagnosis of this condition in the population. This may be particularly important in countries where diagnostic facilities are limited. Since common people complain of "GASTRIC" problem means upper

1. Prof. (Dr.) Md. Zulfikar Ali, Professor & HOD, Dept. of Medicine, KYAMCH, Enayetpur, Sirajgonj.

2. Said Mohammad Iqbal, MPH Student (Final year), Dept. of Allied Health Services, Daffodil International University, Shukrabad, Dhanmondi, Dhaka.

3. Prof. (Dr.) Shah Mohammad Keramat Ali, Dean, Faculty of Allied Health Services, Daffodil International University, Shukrabad, Dhanmondi, Dhaka.

4. Dr. Bellal Hossain, Associate Professor, Dept. of Allied Health Services, Daffodil International University, Shukrabad, Dhanmondi, Dhaka.

5. Dr. Shahjahan, Asst. Professor, Dept. of Allied Health Services, Daffodil International University, Shukrabad, Dhanmondi, Dhaka.

Correspondance: Prof. (Dr.) Md. Zulfikar Ali, Professor & HOD, Dept. of Medicine, KYAMCH, Enayetpur, Sirajgonj.

E-mail: dzali53@gmail.com

abdominal pain and that justified by the fact that Antacid or Proton Pump Inhibitors are currently the new number one selling drugs. As no study is available in Bangladesh at present to prove scientifically the reason for using these antacid or PPIs indiscriminately, so the need for this kind of study is a way out for the gastric problem. This study will help to find out the cause of GI tract disorders and this will differentiate who need antacid and who doesn't.

Methodology:

This study was cross sectional analytical study which was conducted at Khwaja Yunus Ali Medical College Hospital, Enayetpur, Shirajgonj, Bangladesh. This is a tertiary hospital for northern zone of Bangladesh. All people with upper abdominal pain reported in the Gastroenterology department of Khwaja Yunus Ali Medical College Hospital were the target population of this study. This study was conducted from March, 2012 to December, 2012. A pretested structured questionnaire

was used to record information those are socio-demographic, family history of the patients, and height and weight of the respondents for measurement of BMI. In these study all patients were examined with endoscope and the findings were recorded in the questionnaire.

The data were collected from all 1196 patients, endoscoped in KYAMCH. A brief introduction was given to the respondents about objectives of the study by the interviewer at the beginning of face to face interview. A written consent was taken from the respondents. The anthropometry was checked by inter individual or intra- individual variations data management and analysis plan: Collected data were analyzed using software program statistical package for social sciences (SPSS -12). Percentages were calculated was performed to investigate the significant association of the different variables and the prevalence. The findings of the study were presented by percentage, table, charts and chi-square test.

Age Group	Upper GI tract disorders									
	Normal		Inflammation		Ulcer		Malignancy		Erosion	
	n	%	n	%	n	%	n	%	n	%
Less than 30	245	27.44	6	1.98	7	2.32	6	1.98	14	4.62
31 - 40	360	40.32	20	6.60	36	11.88	13	4.29	32	10.56
41 - 50	122	13.66	15	4.95	44	14.52	20	6.60	30	9.90
51 - 60	95	10.64	5	1.65	14	4.62	9	2.97	14	4.62
61 or more	71	7.95	4	1.32	8	2.64	3	0.99	3	0.99
Total (%)	893	74.66	50	16.50	109	35.97	51	16.83	93	30.69

Table 1: Distribution of Age and gastrointestinal disorders

Results

Prevalence rate of gastrointestinal disorder was 303 (25.34%)

Table 1 shows among 1196 endoscopically examined, among them 74.66% were normal. The prevalence of

gastrointestinal disorder was 25.34%. Among the disease persons, 16.50%, 35.97%, 16.83% and 30.69% showed inflammation, ulcer, malignancy and erosion respectively. More than 11% had an ulcer and 14.52% were malignancy. The majority of the sufferers were in between 31-40 and 41-50 years.

Education	Upper GIT disorders									
	Inflammation		Ulcer		Malignancy		Erosion		Total	
	n	%	n	%	n	%	n	%	n	%
Illiterate	15	4.95	44	14.52	20	6.60	39	12.87	118	38.94
Primary	20	6.60	36	11.88	13	4.29	32	10.56	101	33.33
Secondary	6	1.98	7	2.31	6	1.98	14	4.62	33	10.90
Higher secondary	5	1.65	14	4.62	9	2.97	5	1.65	33	10.90
Graduate	4	1.32	5	1.65	2	0.66	3	0.99	14	4.63
Post. Graduate	0	0	4	1.32	0	0	0	0	4	1.32
Total (%)	50	16.50	110	36.30	50	16.50	93	30.70	303	100

Table 2: Educational level of the Upper gastrointestinal disorder patients.

Table 2 shows the most of the PUD patients have low education level. Among them 38.94% were illiterate, 33.33 had primary education and 10.90% secondary,

10.90% HSC passed and 4.32% were highly educated. The diseases prevalence rate is higher in illiterate persons.

Sex	Upper GI Tract								Total			
	Normal		Inflammation		Ulcer		Malignancy		Erosion		n	%
	n	%	n	%	n	%	n	%	n	%		
Male	443	37.35	22	1.85	76	6.40	38	3.20	74	6.24	677	57.08
Female	416	35.07	21	1.77	19	1.60	10	0.84	43	3.62	509	42.92
Total	859	72.42	43	3.62	95	8.01	48	4.04	117	8.86	1196	100

Table 3: Endoscopic findings by upper GIT disorders & sex distribution.

Table 3 shows that the 72.42% respondents had normal findings. Endoscopically findings are 8.86% had erosion, 4.04% malignancy, ulcer 8.01% and 3.62% had inflammation. Males were suffering more than females. Whereas 6.40% males were suffering form ulcer and 1.60% females were suffering ulcer. More than 3.% male and 0.84% females were suffering with malignancy. Erosion was found in 6.24 in male and 3.62% in female.

	GIT disorder (yes)		GIT disorder(no)		Total	
	n	%	n	%	n	%
Abdominal pain (yes)	250	21.08	732	61.72	1035	
Abdominal pain (no)	53	4.46	111	9.36	164	
Total	303	25.54	843	74.46	1196	

Table 4: Gastro intestinal tract disorder patients status after endoscopic examine:

Chi square= 3.3376;P> 0.05; Not significant. Among the 1196 examined 25.54% had PUD and the rest was normal. This indicates that abdominal pain is not enough to diagnose PUD.

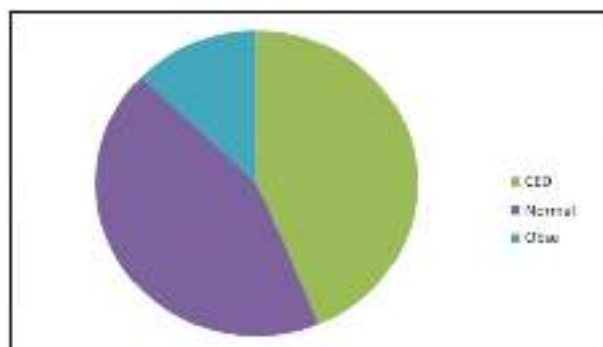


Figure 1: Nutrition status patients of gastrointestinal disorders.

Figure 1 showing nutritional status of only those patients whose were suffering with gastrointestinal disorders, among them 48.84% had CED, 36.37% are with normal BMI and 14.19% were obese.

Discussion

In the present study 25.54% had PUD (Table 1). The

prevalence of DUD and GUD were estimated to be 11.98% and 3.58% respectively. But this present study sample was drawn from village area because in our country most of the people are living in rural area and they have little scope to get neither proper treatment nor they have proper education. They were not well aware about disease (Table-2). Low education rate increased the risk of different gastrointestinal disorders. Because of low education they had no idea about PUD and they had taken antacids when suffering by upper abdominal pain, without consulting to doctors and fall into other diseases. Among them 38.94% were illiterate, 33.33% had primary education and 10.90% secondary, 10.90% HSC passed and 4.32% were highly educated. Seventy eight *H.pylori* positive patients with endoscopically proven peptic ulcer were included in this study. Age of patients ranged from 21 to 60 years with the mean of 38.08 there were 67 (75.28) male and 22 (24.72%) female patient³.

One study was conducted with 40 DUD subject where 25 subjects had family history of DUD and compared to 16 out of 40 and 29 out of 38 as a control⁴. In present study 1196 patients normal is 72.42% which mean they have no PUD or DUD. But other patients 28.58% are suffering different stomach disorders as shown in (Table 3.) Here 9.86% were suffering with erosion in stomach and 8.01% were ulcer suffering in ulcer and 4.04% were suffering from malignancy and 3.62% had inflammation. In (Table 4) showing, endoscopic findings of duodenum 92.33% of respondents are normal and rest of them 1.68% have inflammation, 3.34% ulcer, 0.75% malignancy, 1.52% erosion and 0.25% polyps. So this study would be more authentic than other study⁵. This present study has done with complete history of nutritional status of patients and 303 patients were suffering with ulcer and rest were normal. The statistical analysis was done with chi-square test with the group of abdominal pain and GIT disorders. The test result was $\chi^2(=3.3376)$; $P>0.05$; which was not significant. That means abdominal pain is not enough to diagnose ulcer (Table 4). Among the 1196 examined 25.54% had PUD and the rest was normal.

Conclusion

Most of the patients who were examined endoscopically had no disease. Low nutritional status increases the level of gastrointestinal diseases. The prevalence of gastrointestinal disorders in a tertiary level hospital in rural Bangladesh is increasing.

References

1. A.K. Azad Khan, Mahmud Hasan, P.K. Roy, Shoeb Aziz, Khan, Mahbubul Huq, Shah Mohammad Keramat Ali, Syed Atiqul,: Peptic Ulcer in Bangladesh; Bangladesh Medical Research Council.Vol.XIII(I), June, 1987.
2. Hasan M,Ali SMK, Azad Khan,AK. Peptic ulcer in Bangladesh-an endoscopic surgery. Gut 1985; 16:A 1117.
3. The book of" GI Consult: Perforated Peptic Ulcer". 2007-08-26.
4. Sonnenberg A. Time trends of ulcer mortality in Europe. Gastroenterology 2007; 132-2320.
5. Kurata JH, Haile BM (May 1984): Epidemiology of peptic ulcer disease,; Clin Gastroenterology 13(2):289-307.