

ORIGINAL

PROF-737

## FUNCTIONAL DYSPEPSIA; A COMMON PROBLEM IN BALOCHISTAN

SYED ISRAR HUSSAIN, MBBS, MRCP  
Assistant Professor of Medicine, BMCH, Quetta.

JAMIL AHMAD KHAN, MBBS, FCPS  
Professor of Surgery, BMCH, Quetta.

MUKHTAR MEHBOOB, MBBS, FCPS  
Medical Officer, BMCH, Quetta.

*Rubina Naz, MBBS*  
Postgraduate Trainee, BMCH, Quetta.

### ABSTRACT

**Objectives:** This study was designed to see the prevalence of functional dyspepsia among the patients of dyspepsia. **Design:** Prospective, Observational study. **Setting:** Surgical unit III, Bolan Medical Complex Hospital, Quetta. **Period:** Mar 2002 to Feb 2003. **Subjects & Methods:** A total of 95 patient both male and female included in this study. All the patients had dyspepsia for a long duration and having no previous diagnosis. They were all selected for endoscopic examination of upper gastrointestinal tract. **Results:** The commonest age group was between 31-40 years, 33 (34.7%) patients. The youngest patient was 17 year old and the eldest was 76 years. Male patients 74 (77.9%) had predominance over female 21 (22.1%). The prevalence of functional dyspepsia was 38.9 per 100 patients. This showed that functional dyspepsia is one of the major cause of upper gastrointestinal discomfort in our population. **CONCLUSION:** Early upper G I endoscopy was recommended in patients who are not responding to conventional dyspepsia therapy because of unnecessary cost of drugs, medical investigations and loss of work.

**KEY WORDS:** Functional dyspepsia, peptic ulcer, Endoscopy.

### INTRODUCTION

Dyspepsia is a Greek word, which means bad digestion. It refers to upper abdominal pain or discomfort that is episodic or persistent and associated with heart burn, belching, nausea or vomiting.<sup>1</sup> It occurs in approximately 25% of the population each year.<sup>2</sup> Etiology of dyspepsia is different in different parts of the world. In western literature it is quoted that most dyspeptic patients have no clinically specific abnormality on investigations.<sup>3</sup>

Functional dyspepsia is a symptom complex characterized by postprandial upper abdominal discomfort or pain, early satiety, nausea, vomiting, abdominal distension, bloating and anorexia in the absence of organic disease.<sup>4</sup> Gastrointestinal

motor abnormality, altered visceral sensation and psychosocial factors have all been identified as major pathophysiological mechanisms.<sup>5</sup> This prospective has now replaced the earlier view that the condition was the result of a sole motor or sensory disorder of the stomach.

Gastrointestinal motor abnormality such as delayed gastric emptying<sup>6,7</sup> delayed initial distribution of meal within the stomach,<sup>8</sup> impaired accommodation to meal<sup>9,10,11</sup> antral hypomotility,<sup>12</sup> gastric dysrhythmias,<sup>13</sup> altered duodenojejunal motility have all been identified in subgroups of patients with functional dyspepsia.

Increased perception of physiological or minor noxious stimuli has been demonstrated in patients with functional dyspepsia

in both fasting and postprandial states.<sup>14,15</sup> Functional dyspepsia have hypersensitivity to gastric distension and that postprandial pain is significantly more prevalent in these patients than in patients without visceral hypersensitivity.<sup>16</sup>

Upper gastrointestinal tract endoscopy was performed when dyspepsia was not resolved by several weeks of treatment and a specific diagnosis not established by other means. Endoscopy is more likely to be informative in case of persistent dyspepsia and show diagnostic feature. The aim of this study was to see the prevalence of functional dyspepsia among the patients having dyspeptic symptoms.

## MATERIALS & METHODS

This prospective study was conducted at Surgical Unit – III Department of Surgery, Bolan Medical Complex Hospital, Quetta during the period from Mar 2002 to Feb 2003. Both male and female patients presented with dyspepsia regardless of the age, were included in this study. Patients were selected through out patient department and those referred from medical units.

## INCLUSION CRITERIA

The patients who fulfill the following criteria were included.

1. Dyspepsia not responding to conventional treatment.
2. Patients with dyspepsia associated with alarming symptoms. These are anemia, loss of weight, anorexia, refractory problems, malaena and swallowing problems.

## EXCLUSION CRITERIA

Patient with any of the following condition were excluded from this study.

1. When the cause of dyspepsia was established.
2. When patient in not willing for gastroscopy.

Informed consent was taken. Detail history and clinical examination was performed and recorded on a proforma. All the pros and cons were discussed with the patient. Patient was sent for upper G I endoscopy, where endoscopy was performed after a 6 to 8 hours fast. Xylocaine was used as a

local anaesthetic for oral cavity and pharynx. Intravenous diazepam and spasmolytics were also used. The oesophagus, stomach and duodenum were thoroughly examined and necessary biopsy was taken. All findings recorded on a Proforma. After endoscopic examination gastroscop was washed with tap water and sterilized with cidex® solution.

## RESULTS

A total of 95 patients with upper gastrointestinal complaints were included in this study over a period of one year. The most common age group involved in our study was between 31-40 years 33 (34.7%) patients (Table-I). The youngest patient was 17 year old and the oldest was 76 years old. The sex distribution revealed 74 (77.8%) male and 21 (22.1%) female cases.

Age group	No of patients	%age
17-20	8	8.4
21-30	18	18.9
31-40	33	34.7
41-50	24	25.26
51-60	4	4.20
61-70	7	7.30
71-80	1	1.05
Total	95	100

Male to female ratio was 3.5:1 (Table-II). Functional dyspepsia after upper gastrointestinal endoscopic evaluation was the commonest finding observed in 37 patients (38.94%), while rest of them had definitive upper gastrointestinal pathology 58 patients ( 61.05%) (Table-III). The prevalence of functional dyspepsia among the patients of dyspepsia was 38.9 per 100 patients.

Sex	No of patients	%age
Male	74	77.9%
Female	21	21.10%

Table-III. Endoscopic Diagnosis

Diagnosis	No of patients	%age
Normal findings	37	38.94
Reflux oesophagitis	20	21.05
Duodenal ulcer	12	12.63
Gastric ulcer	8	8.4
Gastritis / duodenitis	8	8.4
Carcinoma of stomach	3	3.15
Other findings	7	7.36

## DISCUSSION

In a proportion of dyspeptic patients, specific structural condition cannot be diagnosed and these patients are said to have functional or non ulcer dyspepsia. Appropriate management of patients with dyspepsia depend on identifying and treating structural abnormality. Previously Barium studies were done to evaluate dyspeptic patients. However upper GI endoscopy is currently considered appropriate investigation for this purpose.<sup>17</sup>

According to AGA'S review<sup>18</sup>, differential diagnosis of dyspepsia mainly includes functional dyspepsia (upto 60%), peptic ulcer disease (15-25%), reflux oesophagitis (5-15%) and gastric/ oesophageal malignancy (<2%).

When large number of unselected consecutive patients with dyspepsia in primary care was investigated by upper GI endoscopy, 10-20% have peptic ulcer disease, 5-15% have oesophagitis, 10-20% have gastritis/duodenitis and 50% have no abnormality.<sup>19</sup>

A study conducted by Amin et al; in Allied Hospital Faisalabad on 200 dyspeptic patients also showed that functional dyspepsia was present in 92% of female patients and 44% of male patients, which represents the major bulk of the patients<sup>20</sup>

In a study of 400 patients from Rawalpindi<sup>21</sup> concluded that non ulcer dyspepsia (56%) acute gastritis (15%), duodenal ulcer (9.2%), gastric ulcer (4.3%) and gastric carcinoma (15.3%).

Main endoscopic findings in 200 Kuwaiti patients referred for

dyspepsia evaluation were normal (32%), non erosive antral gastritis (26%), duodenitis (17.5%), duodenal ulcer (11.5%), deformed bulb (4%), oesophagitis (7%) and erosive gastritis (2%).<sup>22</sup>

In our study functional dyspepsia is much more common as compare to dyspepsia due to other causes. In our series 37 patients(38.94 %) had functional dyspepsia, 20 patients had reflux oesophagitis (21.05%), 12 patients had duodenal ulcer (12.63%), 8 patients had gastric ulcer (8.4%), 8 patients had gastritis/ duodenitis (8.4%), 3 patients had carcinoma of stomach (3.15%) and 7 patients had different finding (7.36%).

## CONCLUSION

The study revealed that functional dyspepsia is more prevalent in males as compared to females. Majority of patients represent in the forth decade of life.

Early upper GI Endoscopy was recommended in patients who respond to early conventional dyspepsia therapy because of unnecessary high cost of drugs, medical investigations and loss of work.

In conclusion, if the functional dyspepsia was diagnosed it can be more effectively controlled by placebo therapy, good doctor patient relationship, prokinetic drugs and tricyclic antidepressant agents.

## REFERENCES

1. Heading RC. Definition of dyspepsia. Scand J Gastroenterol 1991; 182:1-6.
2. Bazaldua OV, Schneider FD. Evaluation and management of dyspepsia. Am Fam Physicians 1990; 60:1773-88.
3. Logan R, Dalaney B. Implication of dyspepsia for NHS. BMJ 2001;323:675-77.
4. Thumshirn M. Visceral perception, pathophysiology of functional dyspepsia. Gut 2002;51:63-66.
5. Camillein M. Non ulcer dyspepsia: a look into future. Mayo clin 1996; 71 : 614-22.
6. Greydanus MP, Vassallo M, Camilleri M, et al. Neurohormonal factors in functional dyspepsia: Insight on pathophysiological mechanism. Gastroenterology 1999; 100 :1311-18.

7. Tucci A, Corinalderi R, Stanghellini V, et al. Helicobacter pylori infection and gastric function in patient with chronic idiopathic dyspepsia. *Gastroenterology* 1992;103: 768-74.
8. Troncom LE, Bennett RJ, Arluwalia NK, et al. Abnormal intragastric distribution of food during gastric emptying in functional dyspepsia patients. *Gut* 1994; 35 :327-32.
9. Thumshirn M, Camilleri M, Saslow SB, et al. Gastric accommodation in non ulcer dyspepsia and the role of helicobacter pylori infection and vagal function. *Gut* 1999; 44: 55-64.
10. Tack J, Piessevaux H, Coulie B, et al. Role of impaired gastric accommodation to a meal in functional dyspepsia. *Gastroenterology* 1998; 115: 1346-52.
11. Salet GAM, Samson M, Roclofs JM, et al. Response to gastric distension in functional dyspepsia. *Gut* 1998; 42: 823-9.
12. Stranghellini V, Ghidini C, Maccarini MR, et al. Fasting and postprandial gastrointestinal motility in ulcer and non ulcer dyspepsia. *Gut* 1992; 33: 184-90.
13. You CH, LeeKY, Chey WY, et al. Electrogastrographic study of patients with unexplained nausea, bloating and vomiting. *Gastroenterology* 1980; 79: 311-14.
14. Lemann M, Deberding JP, Flourie B, et al . Abnormal perception of visceral pain in response to gastric distension in chronic idiopathic dyspepsia. The irritable stomach syndrom. *Dig Dis Sci* 1991; 36: 1249-54.
15. Mearin F, Cucula M, Azpiroz F, et al. The origin of syndrome on the brain-gut axis in functional dyspepsia. *Gastroenterology* 1991; 101: 999-1006.
16. Tack J, Piessevaux H, Coulie B, et al. Role of visceral hypersensitivity in patients with functional dyspepsia. *Gastroenterology* 1998; 114: G1232.
17. Bazaldia OV, Scneider FD. Evaluation and management of dyspepsia. *Am Fam Physician* 1999; 60:1773-88.
18. Talley NJ, Silverstein MD, Agreus L, et al. AGA technical review: evaluation of dyspepsia. *Gastroenterology* 1998; 114: 582-95.
19. Vakil N. Dyspepsia, nonulcer dyspepsia and helicobacter pylori. *Rev Gastroenterol Disord* 2001; 1: 139-46.
20. Amin K, Mehmood H, Alam MM, Haq I. Non ulcer dyspepsia: Patients with dyspeptic symptoms and their relation to the risk factors. *The Professional* 2001; 8:1-5.
21. Satti SA, Ahmad SI, Habib M, Naseemullah M. Oesophagogastroduodenoscopy in primary gastroluminal dyspepsia. *JRMC* 2001;5:50-52.
22. Abahussain EA, Hasan FAM, Nicholls PJ. Dyspepsia and helicobacter pylori infection: Analysis of 200 Kuwati patients referred for endoscopy. *Ann Saudi Med* 1998;18:502-5.

**Specialist- A man who knows more  
and more about less and less.**

**William James Mayo**