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Original Article

Burden of common mental disorders in patients with Functional Dyspepsia

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Abstract

Objective: To assess the frequency of common mental disorders among diagnosed functional dyspepsia patients.

Methods: A case-control study with 150 cases of functional dyspepsia (FD) and 150 healthy controls were recruited from Gastroenterology Clinic at the Aga Khan University Hospital Karachi from 1st March 2009 through 31st August 2009. Urdu version of WHO-developed Self-Reporting Questionnaire (SRQ) was administered to diagnose patients of FD and healthy controls. A cut off score of 8 on SRQ was used to confirm cases of Common mental disorders (CMD). Data was entered and analyzed by SPSS version 16.0.

Result: There was significant difference in CMD i.e. 107 (71.33%) versus 23 (15.33%) in cases and controls respectively ($p < 0.001$). Among cases CMD was more common in females i.e. in 57 (80.3%) as compared 50 (63.3%) in males ($p = 0.022$).

Conclusion: There is high prevalence of Common mental disorders among patients with functional dyspepsia and this needs to be addressed while treating patients (JPMA 60:995; 2010).

Introduction

Functional dyspepsia (FD) is a symptomatically defined heterogeneous clinical entity characterized by chronic or recurrent dyspeptic symptoms thought to originate in the gastro duodenal region, without organic lesions revealed on standard diagnostic modalities.^{1,2}

Epidemiological studies suggest that approximately 15% of the general population in western countries suffers with FD.^{3,4}

Many of psychosocial factors have been examined in the literature in relation to FD. These include psychological distress, personality traits, social support,

life-events and life-stresses.

Epidemiological studies have identified a relationship between psychosocial factors and functional gastrointestinal disorders.⁵

A large study, utilizing semi-structured psychiatric interview and psychometric tools, revealed that 34% of the FD patients versus 15% of the duodenal ulcer patients had a psychiatric diagnosis.⁶ A similarly higher prevalence of psychiatric morbidity has been found in studies conducted in tertiary centers comparing FD patients with those having organic gastrointestinal (GI) disease,^{7,8} but not all studies agree.^{9,10} Psychological distress also appears to coexist more commonly in those with FD compared with the general population.¹¹ In a clinic based study, findings showed that 87% of patients with FD, compared to 25% of patients with organic dyspepsia, had a psychiatric diagnosis.⁹ Common mental disorders are depressive and anxiety disorders that are classified in International Classification of Diseases (ICD)-10¹² as: "neurotic, stress-related and somatoform disorders" and "mood disorders".

The most common psychiatric co-morbidities in patients with functional dyspepsia are Anxiety Disorders, Depressive Disorders and Somatoform Disorders.^{6,13}

The aim of this study was to find out the frequency of common mental disorders in diagnosed patients of FD in a tertiary care hospital of Karachi.

Patients and Methods

A case control study was conducted at the gastroenterology clinics of Aga Khan University Hospital (AKUH) from 1st March 2009 till 31st August 2009.

Cases comprised of all consecutive diagnosed patients of FD attending the gastroenterology clinic, who had, normal biochemistry, normal abdominal sonography, normal upper GI endoscopy and insignificant histopathology to exclude any organic lesion causing dyspeptic symptoms. Controls were selected by convenience sampling, from the attendants accompanying the cases and who had no history of GI disease.

A 20 item Self Reporting Questionnaire (SRQ 20) for anxiety and depression¹⁴ was administered to all patients and controls. A cut-off score of 8 was employed since it provided a sensitivity of 80% and a specificity of 85.4%.

The SRQ was developed by Harding et al. (1980) for a WHO collaborative study to screen for common mental disorders in primary health care. The WHO formally recommended the SRQ 20 in its 1994 manual, which also reviewed the number of SRQ20 studies and reported the validity and reliability of the instrument.¹⁴ It is a self-administered questionnaire, which consists of 20 questions with yes/no answers exploring symptoms of depression,

anxiety, and somatic manifestations of distress. The validity of the SRQ has been established in Urdu in the Pakistani population as well.^{15,16}

Exclusion criteria for both cases and control were history of any chronic medical illnesses (Diabetes Mellitus, Hypertension, Ischaemic heart disease, chronic renal failure, Chronic liver disease, Rheumatoid arthritis, Malignancy, Chronic obstructive pulmonary disease, Asthma).

An informal verbal consent was taken by the consulting physician from the cases, and if they consented to participate then a formal written consent was taken by the data collectors.

The Statistical Software Package for Social Sciences (SPSS 15) programme (Chicago, IL, USA) was used for data analysis. We compared distribution of variables between cases and controls by computing proportions for categorical variables and means and medians for quantitative variables. Results are presented as mean \pm standard deviation for quantitative variables and number (percentage) for qualitative variables. Difference in means according to presence or absence of Common Mental Disorders (CMD) was assessed by using the Independent Sample t-test, and differences in proportion were assessed by using Pearson Chi-square test.

Results

Total of 300 subjects were studied, 150 each in cases and controls. Mean age was 35.72 ± 11.93 years in cases and 35.39 ± 10.58 years in controls. Gender distribution was nearly similar i.e. 79 (52.66%) males in cases and 86 (57.33%) in controls. There was a significant difference in CMD i.e. 107 (71.33%) versus 23 (15.33%) in cases and controls respectively ($p < 0.001$) (Table-1). Among cases CMD was

Table-1: Comparison of variables between cases and controls.

Variable	Cases n = 150	Controls n = 150
Age	35.72 ± 11.93	35.39 ± 10.58
Male	79 (52.66%)	86 (57.33%)
Female	71 (47.33%)	64 (42.66%)
SRQ score	9.90 ± 2.99 $p < 0.001$	4.40 ± 2.90
CMD	107 (71.33%) $p < 0.001$	23 (15.33%)

SRQ=Self Reporting Questionnaire. CMD=Common Mental Disorders.

more common in females i.e. in 57 (80.3%) as compared 50 (63.3%) in males ($p < 0.022$). Among controls CMD was present in 11 (17%) females and 12 (14%) ($p < 0.587$). Mean SRQ score in cases was 9.90 ± 2.99 versus 4.40 ± 2.90 in controls ($p < 0.001$). Among cases mean SRQ score was 9.17 ± 2.84 in males versus $10.70 \pm$ in females ($p < 0.002$)

Discussion

Studies have demonstrated a high prevalence of

psychiatric disorders in patients with dyspepsia. The most common psychiatric co-morbidities in patients with FD are anxiety disorders, depressive disorders and somatoform disorders. In this hospital based case control study we evaluated the frequency of CMD in patients with FD

In present study CMD was found in 107 (71.33%) patients with FD versus 23 (15.33%) in healthy controls ($p < 0.001$). Our findings are consistent with a clinic based study by Magni G et al, which showed that 87% of patients with FD had a psychiatric diagnosis.⁷ Similarly Telly NJ et al analyzed 76 FD patients using eight psychometric scales relating to depression, anxiety and personality change, and found that the scores were significantly higher than those of control groups.¹⁷ Haug et al. analyzed consecutive dyspepsia patients undergoing gastroscopy using 12 psychometric scales relating to depression, anxiety, personality change and somatic symptoms, and found that the scores were higher than those of the group not suffering from dyspepsia.¹⁸ Similarly another study done in Finland have demonstrated that risk of having mental distress was nearly fourfold increased in patients with FD.¹⁹ Other studies also have lent support to the notion that patients with FD, at a clinic level, report more psychological distress than healthy controls.^{6,20}

In the present study CMD was more common in females i.e. in 57 (80.3%) as compared to 50 (63.3%) in males ($p < 0.022$). This is consistent with a study done in Saudi Arabia which showed that psychiatric disorders are more common in female patients with non ulcer dyspepsia.²¹ Mean SRQ score in our study was found to be 9.90 ± 2.99 versus 4.40 ± 2.90 in cases and controls respectively ($p < 0.001$). Mean SRQ score in a study done in Saudi Arabia was found to be 11.7 ± 2.3 versus 5.7 ± 2.6 in cases and controls respectively ($p < 0.001$).²¹

Conclusion

In the present study, CMD proved to be an important co-morbidity factor among subjects with functional dyspepsia. Screening for CMD should be part of FD management and needs to be taken into account when attempting to deal with FD successfully.

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