IRRITABLE BOWEL SYNDROME
IN PATIENTS WITH ANXIETY OR DEPRESSIVE DISORDERS

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Background

The association of irritable bowel syndrome (IBS) and psychiatric disorders (especially anxiety and depression) has long been known.

Two studies analyzing Taiwan's National Health Insurance Research Database showed that IBS may increase the risk of subsequent depressive disorders and anxiety disorders (Lee, et al, 2015; Liu, et al., 2015). However, there is a paucity of data from clinical studies.

The aims of this study were to examine the prevalence and risk correlates of IBS in Taiwanese patients with anxiety or depressive disorders

Materials and Methods

This study was conducted in Chang Gung Medical Center. Psychiatric outpatients with anxiety disorders or depressive disorders were recruited. Psychiatric diagnoses were made by a board certificated psychiatrist based on DSM-5 criteria.

Thirty-two subjects were diagnosed as having major depressive disorder, 36 having dysthymic disorder, 71 having generalized anxiety disorder, and 22 having panic disorder. Some patients had more than one diagnosis. Severity of anxiety and depression were evaluated by patient self rated Hospital Anxiety and Depression Scale (HADS), and clinician administered Hamilton Depression Scale (HAM-D) and Hamilton Anxiety Scale (HAM-A). IBS was diagnosed by a Board certificated colon-rectal surgeon based on Rome III criteria (Ford, et al. 2014).

Conclusions

- Irritable bowel syndrome is prevalent in Taiwanese patients with depressive disorders or anxiety disorders (11.1% in male depressive disorders, 42.4% in female depressive disorders; 21.7% in male anxiety disorders, 32.7% in female anxiety disorders).
- IBS has a high correlation with level of anxiety and depression.
- There were no significant differences among IBS subtypes regarding anxiety and depression.

Results

One hundred and sixteen subjects were recruited. The subjects was diagnosed as either anxiety disorders of depressive disorders. Their age ranged from 21 to 61, with an average of 47.1 +/- 8.9. There were 35 male and 81 female. The disease distribution was 32 subjects was diagnosed as having major depressive disorder, 36 having dysthymic disorder, 71 having generalized anxiety disorder, and 22 having panic disorder. (Some patents were comorbid with more than 1 disease).

If the diagnoses were grouped into only two categories: “depressive disorder” and “anxiety disorder”. There were 51 patients having depressive disorders, and 79 patients having anxiety disorder. Fourteen patients were diagnosed as having both depressive disorders and anxiety disorders.

There are 37 subjects suffer from IBS. The rate of IBS among different groups are shown in table 1. Because Some patients have both diagnosis of depressive disorders and anxiety disorders. Total number of IBS were greater than 37. The severity of anxiety and depression among patient with or without IBS are shown in table 2.

Severity of anxiety and depression shows no statistical difference among subtypes of IBS. (Table 3)

Table 1. Rate of IBS in groups with different psychiatric diagnoses

Diagnosis	Sex	comorbid IBS	Statistics
Depressive disorders	M	2 (11.1%)	Ch-square test, p=0.06
	F	14 (42.4%)	
Anxiety disorders	M	5 (21.7%)	Chi-square test, p=0.51
	F	18 (32.1%)	

Table 2. Comparison of Hamilton Depression Rating Scale (HAM-D) score an Hamilton Anxiety Scale (HAM-A) score between patient with and without IBS

	IBS (+)	IBS (-)	Statistics
HAM-D score	17.3 +/- 3.3	14.3 +/- 5.2	t=-2.92, df=101, p=0.004
HAM-A score	26.0 +/- 3.0	19.2 +/- 6.0	t=-5.92, df=101, p<0.001

Table 3. Scores of HAM-A and HAM-D among four subtypes

Subtypes	IBS-C (N=12)	IBS-D (N=14)	IBS-M (N=9)	IBS-U (N=2)	Statistics
HAM-A	26.8+/-2.5	24.6+/-3.3	25.4+/-2.7	28.5+/-3.5	F=1.857, p=0.156.
HAM-D	16.1+/-4.6	17.5+/-4.0	16.6+/-3.1	17.1+/-4.9	F=0.100 p=0.960