Lavasani Hastanesi'ne huzursuz bacak sendromu tanısıyla gönderilen hastalarda anksiyete ve depresyon

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ÖZET

Amaç: *Huzursuz barsak sendromuna ruhsal etkenlerin katkısının yeterli kanıtı olmakla birlikte, bu ilişki doğrudan, neden-sonuç ilişkisi tipinde değildir ve sendromun etiyolojisini göstermez. Çalışmanın ana amacı, Tahran'da Lavasani Hastanesi'ne gönderilen hastalarda huzursuz barsak sendromu, anksiyete ve depresyon arasındaki ilişkiyi belirlemektir. Diğer amaçları, bu hastalarda anksiyete ve depresyonun yaygınlığı kadar, anksiyete ve depresyon belirtilerine yaş, cinsiyet ve eğitim düzeyinin etkisini belirlemektir.* ***Yöntem:*** *Klinik muayeneden sonra Lavasani Hastanesi'ne gönderilen hastalara Roma II Sınıflandırma Ölçütleri'ne göre sorular soruldu ve SCL-90-R doldurdular.* ***Bulgular:*** *Sonuçlarımız huzursuz barsak sendromuyla anksiyete (r=0.25) ve depresyon (r=0.36) arasında bir ilişki olduğunu ortaya koydu. Ayrıca, anksiyete ve depresyonun ruhsal belirtilerinin cinsiyete göre farklılık göstermediği bulundu. Sendromun sıklığı genç ve yaşlı hastalarda farklı değildi (r=0.13). Eğitim düzeyi ve medeni duruma göre hastalar arasında anlamlı farklılık saptanmadı (t=1.89). Huzursuz barsak sendromu hastaları arasında cinsiyete göre anlamlı bir fark saptandı (kadınlar için t=4.25, erkekler için t=4.53).* ***Tartışma:*** *Huzursuz bacak sendromu tanısı ile anksiyete ve depresyon arasında bir ilişki vardır. Bununla birlikte, bu ilişkiyi daha iyi araştırmak için kontrol grubu ve non-random örneklem yöntemi gibi kısıtlılıkların olmadığı araştırmaların yapılması önerilir.* ***(Anadolu Psikiyatri Derg 2009; 10:212-216)***

Anahtar sözcükler: *Huzursuz bacak sendromu, anksiyete, depresyon*

A study of anxiety and depression in patients referred to the Lavasani Hospital, with irritable bowel syndrome diagnosis

ABSTRACT

Objective: *Although there is enough evidence of the contribution of psychological factors to irritable bowel syndrome, the relationship is not of a direct, linear, cause-and-effect type, and cannot justify the etiology of the syndrome. The main aim of the present study is to determine the relationship between the irritable bowel syndrome and anxiety and depression in patients admitted to Lavasani Hospital, Tehran. The other aims such as determining the effect of gender, level of education, and age on anxiety and depression symptoms, as well as the prevalence of anxiety and depression in the patients, have also been taken into account in this study.* ***Methods:*** *After clinical examination, the patients who had been referred to Lavasani Hospital were asked questions regarding the Rome II classification criteria, and filled the SCL-90-R questionnaire.* ***Findings:*** *Our results demonstrated that there is a relationship between the irritable bowel syndrome and anxiety (r=0.25) and depression (r=0.36). Moreover, it was found that there were no gender differences in terms of the psychological symptoms of anxiety and depression. Furthermore, the frequency of the disorder was not different in young and old patients (r=0.13). No significant difference was detected among patients with respect to the educational level (t=1.89) and marital status. A difference was observed among patients with the irritable bowel syndrome diagno-*

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sis with regard to gender (for female t=4.25, for male t=4.53). ***Discussion:*** *There is a correlation between the irritable bowel syndrome diagnosis and anxiety and depression. Nevertheless, regarding the absence of a control group and the non-random sampling method, further studies are suggested considering these limitations.* ***(Anatolian Journal of Psychiatry 2009; 10:212-216)***

Key words: *irritable bowel syndrome, anxiety, depression*

INTRODUCTION

Irritable bowel syndrome (IBS) is an intestinal disorder that affects ten to twenty percent of the general population. In western countries, especially in the United States, women are affected by IBS from 2 to 2.5 times as often as men.[1, 2]

IBS is characterized by altered bowel movement and abdominal pain, without any detectable structural abnormalities. The intestinal movements decrease or increase irregularly and lose their normal pattern. As a result, the patient experiences episodes of abnormal prolonged colonic spasm. In addition, the intestinal transit is too slow or too quick. These symptoms are exacerbated due to factors such as travel stresses, attending social events, or changes in daily life. An unbalanced and unhealthy diet and some food materials might aggravate the conditions.

Some symptoms of IBS are bloating, constipation, diarrhea, incomplete evacuation, and abdominal pain. Other symptoms are changes in the stool frequency and consistency, difficulty in bowel movement, and passing of mucus.[3]

Information on the accurate prevalence and incidence of the disease is not in hand, owing to diagnosis difficulties, and since many patients do not seek medical care. However, altogether, it seems that most of the patients are under 45 year's old.[4]

It appears that different psychological disorders could lead to similar symptoms. Therefore, in spite of the lack of a well-defined underlying mechanism, the disease probably results from abnormalities in the intestinal nervous system. A review of the related literature suggests that different factors such as visceral hypersensitivity, disequilibrium in neurotransmitters, and psychosocial factors contribute to the occurrence of the disease. For instance, research has demonstrated that emotional stresses can alter the intestinal movement in healthy people as well as in IBS patients. Although psychological disorders are not directly related to IBS, their prevalence is abnormally high in IBS patients. In addition, these factors usually affect the patient's experience of the disease and its treatment, usually in an adverse manner. However, anxiety disorder of one of category co-morbid disorders that has received a lot of attention in patients with IBS.[5,6] Therefore, although it has been demonstrated that IBS patients show high degrees of stress in standard psychological measurements, the underlying mechanism of the relationship between psychological factors - especially anxiety and depression- and the disease is still unidentified. In addition, such a relationship has not been observed in some studies; and it only seems that the IBS does not completely depend on such psychological factors. Several psychological constructs have been identified in patients with IBS that may account for the co-morbidity with anxiety disorders.[5] In other words, the relationship between the IBS and disorders such as anxiety and depression in not a direct and linear one, and cannot account for the occurrence of the disease completely.[7] It could be also related to a spectrum of psychiatric disorders.[8]

Moreover, in spite of distinct differences between men and women in being affected by IBS,[9,10] no studies have been carried out to compare emotional stress in men and women and its role in the IBS. Besides, the relationship between IBS and level of education has not been studied. Finally, although IBS is mainly a disease of adulthood,[11] the difference between young and old patients regarding anxiety and depression is noteworthy. The current study also tries to examine the possible correlation between IBS, on the one hand, and anxiety and depression, differences in terms of gender, age, level of education, and marital status, on the other hand. In sum, this study has been carried out to verify the following hypotheses:

- Irritable bowel syndrome (IBS) is correlated with anxiety and depression.
- There is a difference between IBS patients in terms of gender.
- There is a difference between IBS patients regarding the educational level.
- There is a difference between IBS patients in terms of having anxiety and depression symptoms.

- There is a difference between IBS patients concerning marital status.
- There is a difference between IBS patients regarding their age.

METHODS

This is a descriptive and co relational study in which 200 patients (121 men and 79 women) - who referred to the Internal Ward of Lavasani Hospital, Tehran- had been studied. After hospital admission and expressing their bowel habits and abdominal pain, patients were selected based on “Rome” inclusion criteria. According to these criteria if the admitted patients had the following four symptoms, they were considered to be affected by IBS: observable abdominal distention, abdominal pain relieved by defecation, onset associated with a change in stool frequency, and onset associated with a change in stool form. Patients usually should have experienced at least two or more of the symptoms for 12 weeks in one year to be definitely diagnosed to have IBS. The 200 participants of the study were selected out of 4735 patients admitted during one year.

The possible correlation between IBS and depression and anxiety has been examined too. All the patients, who referred to Lavasani hospital in 2004, were undergone a clinical examination. After screening, the patients were asked to answer questions regarding the Rome II Criteria to make sure about having IBS.

According to Rome II criteria, patients with at least 12, not necessarily consecutive, weeks of abdominal discomfort or pain in the preceding 12 months that has two or more of the following features could be diagnosed with IBS: pain relief following defecation, pain onset associated with changes in stool frequency and form, feelings of incomplete defecation, passing of mucus, and bloating.

The Symptom Check List 90-Revised (SCL-90-R) consists of 23 items, on a five-point Likert scale, ranging from “not at all” to “completely”, to evaluate the psychological characteristics of the participants in terms of anxiety and depression.

The participants were the patients with abdominal discomfort, accompanied by the clinical symptoms of IBS. They were asked to fill the Rome II questionnaire. After reviewing the results and confirming the diagnosis of IBS, the patients were asked to fill the SCL90R questionnaire to determine their anxiety and depression score.

The collected data was analyzed by SPSS software using Spearman's correlation coefficient, analysis of variance, and t-test.

RESULTS

Analysis by Spearman's correlation coefficient showed IBS to be significantly correlated with depression ($p \leq 0.01$). Besides, a significant correlation was observed between IBS and anxiety ($p \leq 0.01$).

On the other hand, there was not a significant correlation between depression and IBS in male and female patients and between anxiety and IBS in male patients; however, there was a significant correlation between anxiety and IBS in female patients ($p \leq 0.01$).

Analysis by Spearman’s correlation coefficient did not reveal a significant correlation between IBS and age.

Univariate analysis of variance indicated no significant difference among the patients with respect to their level of education.

In addition, analysis of the data by t-test demonstrated that women are significantly more affected by IBS than men ($p \leq 0.01$). Moreover, a difference existed among the patients with respect to their marital status, but it was not statistically significant.

Overall, anxiety and depression correlate with IBS with the correlation coefficient of 0.25 and 0.36, respectively ($p \leq 0.01$). There was not a significant difference between male and female patients, regarding the psychological symptoms of anxiety and depression. Spearman's correlation coefficient was calculated at 0.18 for depression in the female and male patients, and at 0.44 and 0.18 for anxiety in the female and male patients, respectively. Regarding this, there is a statistically significant correlation between anxiety and IBS in female patients.

DISCUSSION

Our findings revealed a significant correlation between anxiety and depression and IBS diagnosis. This is not in complete agreement with the results of other studies. For instance, in a study, a significant statistical correlation was found between the symptoms of depression and fever gastrointestinal complaints. This correla-

tion was, however, observed in 34.1% of the participants.[12] In another study, it was revealed that the patients' negative attitude towards abdominal pain mediates between depression and IBS diagnosis. In other words, the relationship between depression and abdominal pain is not linear, but it could be partially accounted for by the attitude of the patient towards the abdominal pain.[7] Also, another study seeking the possible relationship between IBS and negative psychiatric disorders found the prevalence of psychological and behavioral disorders in the group of IBS patients was higher than those of the control group. In other words, IBS might be related to a spectrum of psychiatric disorders.

Nevertheless, although most of the studies report a mediated relationship between IBS and anxiety and depression, or other psychiatric disorders, the current study demonstrates a direct correlation. Furthermore, it was shown that females are affected by IBS significantly more than males. In various studies, it was demonstrated that women were affected by the disease 2 to 4 times as often as men[2] reported that women were affected 2 to 2.5 times as often as men.[2]

The present study did not reveal any significant differences, with respect to gender, in the depression symptoms of IBS patients. However, a significant relationship was observed between IBS and anxiety in female patients, while this was not the case for male patients. This result is not in agreement with the findings of most other studies. Sadock and Sadock, for instance, stated that women experience anxiety more often than men.

The difference observed between the findings of the current study and those of other studies might be explained by the smaller proportion of women participating in the study, and by not having access to random samples of both genders.

Regarding the other variables considered in this study, no significant relationship was observed with respect to age, level of education and marital status. In spite of the thorough literature review performed on the relationship between IBS and depression and anxiety, it seems that no attention has been paid to variables such as level of education and marital status by other researchers. So, it is not possible to interpret the results of this study. However, regarding the age variable and the lack of any difference in the frequency of IBS between young and old patients, the present results are different from the findings of other studies. Some studies state that IBS is a disorder of the young, and most cases are under the age of 45; while some others report that the elderly are affected by IBS up to 92%, similar to the middle-aged.[13] Other studies remarked that the prevalence of IBS is much lower in adolescents and the young. In a study on university students[14] reported the frequency of IBS to be 11.5%, while the prevalence of IBS in university students ranged from 6.3% to 37% in other studies.[14] On the other hand, some studies on IBS in adults determined the prevalence at 10% to 20%, which is similar to that for the young.[15] It could be concluded that some factors other than age, such as having access to health care services, socioeconomic factors, and the severity of symptoms would affect the patients' health care behavior. Therefore, it could be stated that the lack of any difference in the prevalence of the disease between different age groups in the present study is in accordance with the results of the above-mentioned studies.

Finally, the limitations of the current study are worth mentioning. The target population of this study could not be representative of the completely adult population affected by IBS. In addition, the reliability and validity of the SCL-90R utilized in this study has not been tested for the Iranian population. However, the patients might have taken some considerations into account, which might have adversely affected the accuracy of the responses. In addition, the psychological factors affecting the disorder were not controlled in this study. As the disorder has an underlying multifactorial nature, and the participants did not take part in the study randomly, a control group was needed to obtain results that are more reliable. Furthermore, as most of the participants were male patients, a gender bias might have affected the results. Finally, regarding the type of the study, it was not possible to determine any probable cause-and-effect relationship between the psychological factors and the disorder.

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