Somatic symptoms of depression in patients with idiopathic ulcerative colitis*

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ABSTRACT
Objective: To identify the most common symptoms of depression in patients with idiopathic Ulcerative Colitis (UC) and to compare these symptoms of depression with those in patients without UC. Method: The sample consisted of 100 adults with Ulcerative Colitis attending the outpatient clinic for Inflammatory Bowel Diseases of the “Hospital das Clinicas” of the School of Medicine of the University of São Paulo, who were compared with 100 individuals without the disease. Following ethical procedures, each participant answered to the Beck Depression Inventory. Results: Of the 21 symptoms of depression, six were statistically significant for distortion of body image, inability for work, fatigue, loss of appetite, somatic concerns, and decreased libido. Conclusions: Patients with UC had more somatic symptoms of depression than patients in the control group. Similarity of symptoms of UC with those of depression leads to under diagnosing patients with UC.
Keywords: Proctocolitis/psychology; Depression; Chronic disease

RESUMO
Objetivo: Identificar os sintomas depressivos mais freqüentes entre portadores da doença Retocolite Ulcerativa Idiopática (RCUI) e compará-los a um grupo de controle. Método: A amostra compôs-se de 100 indivíduos adultos portadores de RCUI que frequentavam o Ambulatório de Doenças Inflamatórias do Côlon do Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo que foram comparados a 100 indivíduos isentos da doença. Após os procedimentos éticos devidos todos responderam ao Inventário de Depressão de Beck. Resultados: Dos 21 sintomas depressivos, seis mostraram valores estatísticos significativos para: distorção da imagem corporal, inibição para o trabalho, fadiga, perda do apetite, preocupação somática e diminuição de libido. Conclusão: Verificou-se que os doentes apresentaram com mais frequência sintomas depressivos da esfera somática quando comparados ao grupo de controle. A similaridade dos sintomas entre a doença e os sintomas depressivos faz com que os doentes sejam frequentemente subdiagnosticados.
Descritores: Proctocolite/psicologia; Depressão; Doença crônica

RESUMEN
Objetivo: Identificar los síntomas depresivos más frecuentes entre portadores de la enfermedad Rectocolitis Ulcerativa Idiopática (RCUI) y compararla a un grupo de control. Método: La muestra estuvo compuesta de 100 individuos adultos portadores de RCUI que frecuentaban El Consultorio Externo de Enfermedades Inflamatorias del Colon del Hospital de las Clínicas de la Facultad de Medicina de la Universidad de Sao Paulo que fueron comparados con 100 individuos libres de la enfermedad. Después de los respectivos procedimientos éticos todos respondieron al Inventario de Depresión de Beck. Resultados: De los 21 síntomas depresivos, seis mostraron valores estadísticos significativos para: distorsión de la imagen corporal, inhibición para el trabajo, fatiga, pérdida del apetito, preocupación somática y disminución de la libido. Conclusión: Se verificó que los enfermos presentaron con más frecuencia síntomas depresivos de la esfera somática cuando fueron comparados con el grupo control. La similitud de los síntomas entre la enfermedad y los síntomas depresivos hace que los enfermos sean frecuentemente subdiagnosticados.
Descritores: Proctocolitis/psicología; Depresión; Enfermedad crónica

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INTRODUCTION

The area of health has achieved great technological and scientific advances. In this way, man seeks to delay death, extending his life span by investigating diseases. Such advances have enabled early disease diagnosis and the establishment of adequate therapy in advance, with promising results to control disease progress and perhaps even find a cure. With these diagnostic and therapeutic advances, a higher number of chronically ill individuals, who often require constant care throughout life, can be identified.

The population’s longer life expectancy is associated with pharmacological development, which has enabled disease progress control and also investigations aimed to analyze life shortening situations. However, in cases where cure cannot be achieved and whose organic and physical changes are important, quality of life as it can be maintained continues to be a challenge to be overcome.

The chronic condition of a disease involves studies on the psychological, sociological, economic, cultural and emotional spheres, which, due to their diversity and reach, stimulate the need for further research, given their complexity. Depending on the severity, the chronic disease is an incapacitating condition that requires extended care, and continuous and concomitant actions for primary and secondary prevention and rehabilitation service access.

People suffering from chronic diseases undergo lifestyle changes and usual major losses, whether in the social, economic or personal spheres. The healing process is very slow or inexistent, causing residual incapacity and frequent disease recurrences. In this way, a patient with a chronic disease is constantly anxious, because they are concerned about the possibility of negative outcome associated with their disease.

Idiopathic Ulcerative Colitis (IUC) is a diffuse chronic inflammatory intestinal disease that initially affects the rectum, and may reach the large intestines. It is a mucosal inflammatory condition, of which diarrhea is its main symptom, present in 100% of cases. IUC involves symptoms that interfere with the individual’s quality of life. This stressful situation causes irritability and anguish and may lead, in the majority of cases, to depression. Not only IUC, but also several diseases are clearly associated with depression, especially cardiovascular, endocrine, neurological, renal, and oncologic diseases, as well as other chronic painful syndromes.

Depression is a term employed to designate a disease that is characterized by several changes in an individual’s behavioral and physiological spheres. The relationship between these two spheres occurs with the biochemical imbalance of neurons responsible for emotional control. Sadness is a feeling common to all human beings. However, in the case of depression, this feeling, associated with negative thoughts, lasts for weeks or even months. Sadness and sorrow are normal feelings for someone who has learned about a chronic disease, once questions such as response to treatment, duration of overall survival and cure rate cause anxiety and are stress factors among people with certain pathologies. This results in increased risk of depression in patients hospitalized in non-psychiatric clinics.

Secondary depression, i.e. that resulting from physiological changes caused by other diseases, is frequently present in patients with chronic diseases. However, it is usually underdiagnosed, once its depressive symptoms can be mistaken for those present in certain debilitating chronic diseases.

Care for the patient with secondary depression must be multiprofessional. The nurse’s action focus is to care for the human being in health and during crises, such as diseases, aiming to relieve human suffering, keep their dignity and promote means for those cared for to cope with crises and life and death experiences. When caring for non-psychiatric depressive patients, the nurse seeks, through inter-personal relationship, the patient’s autonomy development in the health-disease process, i.e. the nurse “helps the person cared for to accept themselves, know themselves, communicate, interact and integrate with others, make independent decisions, and solve emotional conflicts in their search for adjustment.”

Difficulties are observed when diagnosing depressive disorders in hospitalized patients with chronic diseases, because the disease’s chronic symptoms and the drugs used can show effects similar to depression. The nurse must use their knowledge, acquired during their professional qualification and which focuses on the individual’s biopsychosocial approach, not to allow depression to be underdiagnosed. In addition, the professional should be willing to listen to the patient, their accounts and requests, and have the ability to do this. They should also have knowledge about the non-verbal communication used by this patient to be able to distinguish chronic disease symptoms from depressive symptoms.

In this way, perception of depressive symptoms in patients with non-psychiatric chronic diseases is essential for nursing professionals. People suffering from depression show low treatment adherence, increased pain, cognitive deficit, delayed recovery after surgical procedures, and inability to care for themselves. Moreover, depressed patients feel hopeless concerning recovery from disease, do not believe their situation can improve and, in case the perception of lack of hope and comfort continues or becomes more severe,
the patient may consider or even commit suicide.\textsuperscript{12}

Thus, depressive symptoms must be valued and identified with the patient's own assessment for care to be efficient. Thus, this study aimed to identify the most frequent depressive symptoms in individuals with idiopathic ulcerative colitis and compare them to a control group.

**METHODS**

This was a cross-sectional, exploratory and descriptive study, with a quantitative methodology. It was also a subproject of the researcher's Doctoral thesis, entitled "Processes to cope with stress and depressive symptoms in patients with Idiopathic Ulcerative Colitis"\textsuperscript{13}.

A convenience sample of patients registered with the Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo (HCFMUSP) Outpatient Clinic for Colon Inflammatory Diseases was adopted. This outpatient clinic is managed by the Faculdade de Medicina da Universidade de São Paulo Department of Surgery Coloproctology Service. The study sample was comprised by 100 patients with confirmed diagnosis of IUC, who had a booked routine medical consultation.

Those accompanying patients undergoing upper digestive endoscopy procedures formed the control group. Relationship between individuals undergoing this endoscopic procedure and those accompanying them was not considered.

Criteria to include individuals in the control group were as follows: to be older than 21 years of age; to accept participating in the research and sign the HCFMUSP's "Informed Consent Form"; not to have used anti-depressive or tranquilizing drugs for at least a month before participation in the research; and not to have chronic diseases they are aware of. For the group of patients, the criterion was to have IUC in any stage of this disease (chronic, recurrent or quiescence).

**Data collection instrument**

Beck Depression Inventory\textsuperscript{14} was used, because it is an instrument to measure and self-assess depression, with both clinical and research use, and also because it is considered to complement the patient's diagnostic assessment. In individuals without previous depression assessment, the inventory can be employed to detect the presence of depressive symptoms, or as the beginning of the triage process.

This Inventory shows 21 categories of symptoms and types of behavior characteristic of depression. Each category consists of a series of four different levels of intensity of manifestation (0 to 3 points).

Data collection began after the research project was approved by the Department of Gastroenterology Ethics Committee of the Faculdade de Medicina da Universidade de São Paulo and by the HCFMUSP Research Project Analysis Clinical Management Ethics Committee.

Initially, individuals were invited to participate in the study. After accepting it, they signed an Informed Consent Form.

These individuals were sent to a room in the Outpatient Clinic so they could have more privacy to answer the questions. Guidance on how to fill out the instrument and its items were read out by the researcher, who avoided discussing the content and meaning of questions not to influence participants' responses. Data collection ended conveniently based on quantitative, non-temporal criterion.

**Statistical analysis**

In the several depressive symptom categories, comparison between the maximum scores found in the group of individuals with IUC and in the control group was performed using the Kruskal-Wallis test for non-parametric data. Maximum scores found were shown as crude numbers with respective chi-square and $p$ values\textsuperscript{15}.

**RESULTS**

In this study, both the group of individuals with IUC and the control group were comprised by 65 women and 35 men. Minimum age was 21 years for both groups and maximum age was 69 years among individuals with IUC and 78 years in the control group. Predominant age group was between 21 and 40 years in both groups. Individuals who were in the illiterate category or had not completed elementary school (grades 1 through 9) predominated (47%) among those who were ill, whereas, in the control group, individuals who had not completed/completed elementary school predominated (46%). The majority lived with their partner (63% in the IUC group and 62% in the control group) and also lived with family members (92% in the IUC group and 85% in the control group), were Catholic (60% in the IUC group and 58% in the control group), practiced their religion (55% in the IUC group and 56% in the control group), and were from the city of São Paulo (85% in the IUC group and 92% in the control group).

Of all the 21 depressive symptoms listed on the inventory, six showed significant statistical values, when compared to the control group. The following somatic symptoms showed predomination of score among those with IUC: body image distortion, inhibition to work, fatigue, loss of appetite, somatic concern and decrease in libido (Table 1).
Table 1 - Individuals with IUC and individuals in the control group, according to total distribution of scores found for each symptom. São Paulo (SP), Brazil, 2002.

<table>
<thead>
<tr>
<th>Symptom</th>
<th>IUC</th>
<th>Control</th>
<th>χ²</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sadness</td>
<td>66</td>
<td>57</td>
<td>0.060</td>
<td>0.797</td>
</tr>
<tr>
<td>Pessimism</td>
<td>46</td>
<td>34</td>
<td>0.295</td>
<td>0.5870</td>
</tr>
<tr>
<td>Feeling of failure</td>
<td>32</td>
<td>27</td>
<td>0.087</td>
<td>0.7679</td>
</tr>
<tr>
<td>Dissatisfaction</td>
<td>58</td>
<td>65</td>
<td>0.040</td>
<td>0.9528</td>
</tr>
<tr>
<td>Feeling of guilt</td>
<td>40</td>
<td>36</td>
<td>0.013</td>
<td>0.9101</td>
</tr>
<tr>
<td>Feeling of being punished</td>
<td>46</td>
<td>58</td>
<td>0.908</td>
<td>0.3406</td>
</tr>
<tr>
<td>Self-deprecation</td>
<td>25</td>
<td>27</td>
<td>0.002</td>
<td>0.9667</td>
</tr>
<tr>
<td>Self-accusation</td>
<td>71</td>
<td>70</td>
<td>0.256</td>
<td>0.6128</td>
</tr>
<tr>
<td>Suicidal ideation</td>
<td>15</td>
<td>6</td>
<td>2.085</td>
<td>0.1487</td>
</tr>
<tr>
<td>Outbursts of tears</td>
<td>69</td>
<td>88</td>
<td>0.260</td>
<td>0.6101</td>
</tr>
<tr>
<td>Irritability</td>
<td>110</td>
<td>134</td>
<td>0.986</td>
<td>0.3208</td>
</tr>
<tr>
<td>Social isolation</td>
<td>33</td>
<td>37</td>
<td>0.555</td>
<td>0.4562</td>
</tr>
<tr>
<td>Indecision</td>
<td>74</td>
<td>55</td>
<td>1.670</td>
<td>0.1963</td>
</tr>
<tr>
<td>Body image distortion</td>
<td>64</td>
<td>35</td>
<td>4.743</td>
<td>0.0294</td>
</tr>
<tr>
<td>Inhibition to work</td>
<td>79</td>
<td>34</td>
<td>15.388</td>
<td>0.0001</td>
</tr>
<tr>
<td>Sleep disorders</td>
<td>91</td>
<td>93</td>
<td>0.027</td>
<td>0.8688</td>
</tr>
<tr>
<td>Fatigue</td>
<td>98</td>
<td>61</td>
<td>12.039</td>
<td>0.0005</td>
</tr>
<tr>
<td>Loss of appetite</td>
<td>52</td>
<td>33</td>
<td>4.124</td>
<td>0.0423</td>
</tr>
<tr>
<td>Weight loss</td>
<td>63</td>
<td>32</td>
<td>3.340</td>
<td>0.0676</td>
</tr>
<tr>
<td>Somatic concern</td>
<td>94</td>
<td>60</td>
<td>9.899</td>
<td>0.0017</td>
</tr>
<tr>
<td>Decrease in libido</td>
<td>97</td>
<td>52</td>
<td>7.945</td>
<td>0.0048</td>
</tr>
</tbody>
</table>

IUC – Idiopathic ulcerative colitis

Maximum score possible for each symptom is 300 points.

DISCUSSION

Chronic diseases and depression are frequently associated. However, in many cases, mood disorders are still underdiagnosed and undertreated, especially because of the similarities between depressive and chronic disease symptoms.

The frequency of mood disorders in patients hospitalized in the general hospital varies between 20% and 60% (16-17). With such figures, variation depends on hospitalization and on the population studied – socio-demographic characteristics, type of disease, severity and chronicity (17).

In the present study, the following were significant depressive symptoms: body image distortion, inhibition to work, fatigue, loss of appetite, somatic concern, and decrease in libido. Some of these symptoms were similar to those obtained by other studies that analyzed the relationship between depression and chronic comorbidities, even when different methodologies were applied (18-19).

Moreover, by focusing on the tendency towards depressive symptoms in the patients studied, these were found to show higher total scores in 14 symptoms, when compared to the control group. Not only somatic symptoms, but also cognitive-affective ones, especially those that express feelings of sadness, pessimism, guilt, indecision, and even suicidal ideation, received higher scores among patients.

A study performed in a sample of Canadian patients with intestinal inflammatory diseases (IUC and Crohn's disease) revealed that these patients showed a prevalence of depression, when compared to the general population. Depressed patients reported higher frequency of symptoms such as dietary habit changes, daily activity restrictions and suicidal ideation. In addition, authors mentioned the importance of assessing depressive symptoms, because treatment of these changes contributes to improve these patients’ quality of life and promotes better adherence to treatment (20).

In principle, evidence is found that depressive symptoms precede inflammatory disease (IUC) activity. This fact appears to be associated with the influence symptom severity has and its impact on the social, economic, professional and family spheres of the individual who is ill. In one study (21), authors found a statistical relationship between disease activity, anxiety and depression. Authors reported that anxiety is a moderating factor between disease activity and depression, and it is also considered a personal trait and a risk factor for those who are ill.

Despite depressive symptoms being more frequent among individuals with IUC in this study, it is important to emphasize the difficulty to assess depression in the medical context. It is understandable that somatic symptoms have higher scores, due to the disease itself, and the fact that this is not necessarily a state of depression. Analysis of total scores of depressive symptoms of individuals with IUC, compared to the control groups, could be obtained by previously published studies (22-23).

Experts in this field (24) point out that symptoms such as fatigue, decrease in libido, listlessness, insomnia, and weight loss are somatic or vegetative symptoms common to several diseases and to the use of medications, which may lead to a higher number of false-positive results, as these are mistaken for depressive symptoms. Even though certain disease or treatment conditions are expected to contribute to the appearance of a depressive disorder, some symptoms are highly indicative of this syndrome. Among these are suicidal ideation, feeling of failure, feeling sorry for oneself, indecision, crying and dissatisfaction. In the group of individuals with IUC of this study, above mentioned symptoms such as suicidal ideation, feeling of failure and indecision were those receiving the highest scores, when compared to the control group.

According to the results, despite their revealing favorable responses in terms of the presence of depressive symptoms in patients, two conditions make assessment difficult. Initially, it would be understandable to detect the presence of depressive symptoms in individuals who find themselves in the disease’s period.
of exacerbation. This association can be considered an incapacitating and reactive condition to the chronic disease, significantly decreasing in the disease’s period of remission\(^8\).

Another aspect was considered when assessing non-psychiatric patients, because, in this study, patients with IUC showed depressive symptoms common to the disease condition. In one study, authors observed\(^25\) that fatigue and decrease in concentration were the most frequent non-melancholic depressive symptoms attributed to depression. Nonetheless, these symptoms were also the most common in terms of other medical conditions. It is important to emphasize that many patients have somatic symptoms as a result of the disease condition itself, which does not necessarily mean a state of depression. Symptoms such as fatigue, decrease in libido, listlessness, insomnia and weight loss can increase the number of false positives as they are mistaken for depressive symptoms\(^11\). However, in other studies\(^19,25\), fatigue, as well as sleep, weight, appetite and psychomotor changes help to reinforce the diagnosis, when in excess or associated with cognitive and affective symptoms of depression, as they are rarely found in cases of absence of depression. Symptoms only begin to have meaning when associated with other historical and clinical data, thus resulting in a depressive diagnosis\(^8\).

Another aspect that makes it more difficult to assess depression in patients with a non-psychiatric chronic disease is the Beck Depression Inventory’s constitution itself, as it was originally designed based on the experience with psychiatric patients. These measures may not be sufficiently sensible to assess depressive symptoms in individuals with a non-psychiatric disease. Moreover, characteristics of depression in individuals with non-psychiatric medical conditions differ from those associated with diseases\(^20\).

Even though the difficulty in assessing depressive symptoms in patients with non-psychiatric chronic diseases, especially those with IUC, is considered, efforts must be made to obtain the best form of assessment of these individuals. Adequate methods and instruments for this assessment should be designed and incorporated into health care protocols.

**CONCLUSION**

In this study, symptoms of body image distortion, inhibition to work, fatigue, loss of appetite, somatic concern and decrease in libido were relevant in the group of patients. Even though symptoms of sadness, pessimism, feeling of failure, feeling of guilt, suicidal ideation, indecision, self-accusation and weight loss did not have statistical significance, they scored higher numerically as well, when compared to the control group.

With these data, it can be concluded that the patients with IUC in this study showed scores suggestive of depressive symptoms, which need to be analyzed in association with other factors that better characterize mood disorders. Even when the difficulties to effectively detect depressive symptoms in medical conditions are considered, efforts must be made to find more feasible methods to better understand these individuals’ psycho-emotional aspects, and also to contribute to improve their health conditions. It is expected that these methods can shed some light on the relationship between emotional aspects and IUC. Finally, that identification and intervention models are developed to enable nursing to act effectively in the health-disease relationship.

**REFERENCES**

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