

Quality of Life in Crohn's Disease : Post Surgical Evaluation

Di Grezia G^{1*}, Iannaccone T², Grassi R¹, Gatta G¹

¹Radiology Department, Second University of Naples

²Psychiatric Department, Second University of Naples

*Corresponding author: Graziella Di Grezia, Radiology Department, Second University of Naples, Piazza Miraglia 2- 80138, Naples, Italy; Tel: 0039 0815665200; E-mail:graziella.digrezia@unina2.it

Received Date: October 01, 2016 Accepted Date: October 24, 2016 Published Date: October 26, 2016

Citation: Graziella Di Grezia (2016) Quality of Life in Crohn's Disease : Post Surgical Evaluation. J Surg Proced Tech1: 1-4.

Abstract

Aim: Purpose of the study was to analyze the quality of life and psychiatric symptomatology in post-surgical Crohn's patients.

Methods: In this study were enrolled post-surgical Crohn's patients; they were subjected to Self-Report Symptom Inventory – Revised (SCL-90-R) to analyze general psychiatric symptomatology; Hamilton depression rating scale (HAM-D) to analyze depressive symptomatology; SHORT FORM-36 (SF-36) to evaluate their quality of life.

Results: The sample has major limitations in physical activities; they complain about daily activities; they consider their general health as the most poor and destined to deteriorate further in time.

Conclusion: Post-surgical Crohn's disease patients present a significant impairment in several areas of life quality and a psychiatric symptomatology that shows emotional – psychological discomfort due to the underlying disease and to the recurrence fear.

Keywords: Post surgical evaluation; Quality of life; Crohn's disease

Introduction

Crohn's disease is one of the most frequent inflammatory bowel conditions [1]. If the first diagnosis can sometimes be difficult, diagnostic imaging may aid, thanks to the latest generation techniques that allow an evaluation of the nature and location, as well as grade and activity of the Crohn's disease. The investigations that do not use ionizing radiation are first choice, especially in young patients (entero-RM), as well as techniques such as ultrasound contrast medium will also assist in the follow-up and evaluation of therapy, due to increased patient compliance [2-4]. They remain in the last row of conventional radiology investigations and TC; the first almost entirely set aside, the second used in cases where MRI is available or there are no absolute contraindications or for

carrying out [5,6]. The major problem is also represented by complications such as fistula and hernia of the pelvic floor, especially in women [7-9], as well as the risk of perforation [10]. Chronicity of this disease and the possibility of recurrence throughout the course of life of a patient typically receives the diagnosis at a young age, is only one of the relevant factors in related to these psychiatric diseases. Indeed is possible to find, with methods of increasingly sophisticated, with more selected samples investigation, the presence, even if in different percentages, of an association between episodes of recurrent major depression and Crohn's disease. Although already in 1949 B. Crohn which he discovered and which bears his name, declared this pathology outside the scope of psychosomatic but the researchers have nevertheless continued to investigate the psychological substrate of this deadly form of ileitis. Recent studies in psychobiological field also show a correlation between frequent exacerbations of severe anxiety disorders and this ileitis [11]. The hypothesis of a direct and linear causality of psychiatric disorders is considered by the doctors too simplistic and reductive. To find a correlation is investigated on underlying variables to the psychological distress associated with mood disorders: pathological eating behaviors, smoking and alcohol addiction, family history of psychiatric disorders and traits of personality status. Thus was born the theory of multifactorial then ousted by the more recent hypothesis that psychiatric disorders develop as a result of this disease, that is secondary to somatic disorder, mainly because of the chronicity and severity of the symptoms. It should not, confuse the pathogenetic mechanisms other than etiologic and therefore should be carefully analyzed the reactive emotional functioning of the patient. The multidisciplinary treatment is thus necessary to evaluate the psychosocial aspects of the patient's personality and characteristics. There is no a final treatment for this disease that can affect all the digestive tract, from mouth to anus; even if the surgical intervention could be useful in case of complications, the recurrence rate is very high [3]. Even if the strictureplasty technique can preserve the continuity without intestine loss, a resection is the treatment of choice in some cases. However, many patients will develop recurrences after resection of Crohn's disease. Indeed, the fear of a recurrence and/or a complication, such as perforation and fistulas.

Methods

The total sample consisted of 67 patients suffering with Chron's disease post surgery. All subjects participating in the study with an activity of severe disease, are in charge at the Gastroenterology Surgery Service and follow also a drug therapy. Provided their informed consent, were subjected to a psychological and psychiatric assessment by the administration of a battery of standardized instruments.

In the course of the evaluations we were also collected socio-demographic data and pathology history. For the evaluation of the general psychiatric symptomatology it was used Self-report Symptom Inventory - Revised (SCL-90-R), a widely used self-administered tool in clinical and research [12,13]. In its final version the scale is composed of 90 items and assesses the presence and severity of psychological distress symptoms in the last week (including the day on which assessment is carried out) in different psychopathological domains; each item is given a score on a Likert five-point scale ranging from "not at all" to "very much." The instrument differs from other self-administered questionnaires for the detection of psychological problems since measuring both the internalizing symptoms (such as depression, somatization, anxiety manifestations) as those externalizing (such as aggression, hostility, impulsivity), so now covering almost entirely the psychopathological spectrum. The dimensions that constitute the scale are: 1) somatization; 2) obsessive-compulsiveness; 3) sensitivity; 4) Depression; 5) anxiety; 6) anger-hostility; 7) phobic anxiety; 8) paranoid ideation; 9) psychoticism. For the evaluation of depressive symptoms it was used Hamilton Depression Rating Scale (HAM-D) [14]. In its original formulation (1960) the HAM-D was composed of 17 items, brought to 21 in the next version (1967); in addition to these, they have circulated several other versions with more or less arbitrary variations, the most notorious of which is the 24 items (the items are added to the feeling of helplessness, hopelessness and the feeling of worthlessness). The item HAM-D are graduated, some 3 (0-2) and other 5 (0-4) severity levels, and each level is associated with a fairly precise definitions. La HAM-D, according to the precise directions Hamilton, is not a diagnostic tool and should not be used for this purpose, but to assess severity and intensity of a depressive framework referring to the last week. For the rating of perceived health status (quality of life) was used Short Form-36 (SF-36), a questionnaire characterized by brevity (the average person takes no more than 10 minutes for its completion) and the precision (the instrument is valid and reproducible) [15]. The measuring instrument in quality of life is related to the better known health and is used in the scientific literature. The questionnaire was developed from years 80 in the United States as a generic tool, multi-dimensional, divided into 36 questions that allow you to assemble 8 different scales. The 36 questions will relate conceptually to 8 different concepts related to physical and mental health: 1) physical activity; 2) limitations in activities related to their role and due to physical health problems; 3) limitations in activities related to their role and due to the emotional state; 4) physical pain; 5) perception of general health; 6) vitality (energy / fatigue); 7) Social activities; 8) mental health (psychological distress / psychological well-being). A single item explores the change in health status. The questionnaire on the SF-36 health status has been built to achieve the minimum standards of precision required for the comparison of the groups with respect to the eight areas considered and provides a profile of scores useful to the

understanding of both the differences in the physical and mental health of both the ' impact on health caused by chronic disease and its treatment. The SF-36 questionnaire can be self-compiled or may be subject to interview. All SF-36 questions, except one, are for a period of four weeks prior to completing the survey. Sociodemographic and clinical variables were analyzed with descriptive statistics methods: by Univariate ANOVA with Bonferroni correction for continuous variables and the χ^2 for the nominal or ordinal variables. All statistical analyzes were performed using the statistical package SPSS (version 16.0).

Results

In our sample, there are statistically significant differences in all subscales of the SCL-90. In particular, the subscale that presents the greatest statistical significance is "obsessive-compulsive" ($p < 0.0001$) with a more marked deterioration on psychopathological floor. In fact, patients with UC have high scores on all subscales of the SCL-90, with statistically significant differences compared to the control group. There are statistically significant differences except in reference to the subscale "phobic anxiety" ($p < .05$). The only statistically significant difference is related to the subscale "psychoticism" ($p > .05$). From the data obtained in Ham-D it shows that these patients have significantly much higher scores ($p > , 0001$). There were no statistically significant differences with the scale of depressive symptoms. Patients who have high scores on the HAMD-TOT scale present a significant deterioration in the quality of life. In particular, these patients have higher scores on subscales 1) physical activity ($p < .01$; $F = 7.080$, $B = - 433$); 2) physical pain ($p < .03$; $F = 4.730$, $B = - 566$); 3) the general health perception ($p < .01$; $F = 6,336$; $B = - 410$) With scores also shows high levels of somatization are related to an important limitation of physical activity ($p < .05$; $F = 4$, $B = - 466$) a major limitation of daily life because of physical pain ($p < .00$; $F = 24,185$; $B = -, 1652$) and to a worse perception of general health ($p < .007$; $F = 7.832$, $B = - 658$) statistically significant differences were found for the subscales "physical activity" ($p < .05$), "body pain" ($p < .01$), "Role and Physical Health" ($p < 0.0001$) and "health general" ($p < 0.0001$). The analysis with regard to the SF-36 subscales shows significantly higher scores on the subscales "Physical Activity", "body pain" ($p < .05$), "The overall health", "Role and physical health" ($p < 0.0001$).

Discussions

This study was aimed to explore the quality of life in patients with Crohn's disease after surgical intervention and the impact that the psychopathological characteristics have on this illness. The results of our study show that these patients have a significantly impaired quality of life in different areas explored. In particular, compared there are more restrictions in the performance of all physical activities, such as bathing, climbing stairs, lift weights, walk short distances because of physical health (physical activity); perceive more intensely physical pain or discomfort and interference it causes with normal activities at work, at home and at play (physical pain); complaining about major problems in performing daily activities, reducing the time spent at work, producing a poor personal functioning due to physical problems (role and physical state); total assessed their general health as poorer and destined to deteriorate further over time (overall health) [16,17]. Study results show that in the context of patients with Crohn's disease are mainly those

with at present a greater impairment of quality of life. Patients with Crohn's disease post surgery presented significant limitations in all areas of quality of life considered by the SF-36 [18,19]. With regard to socio-demographic characteristics of the sample data examined did not show significant differences. Another aspect examined by the study is related to psychiatric comorbidity in these patients. It is showed a higher impairment of overall psychopathology framework, with particular regard to the symptomatic aspects of the spectrum anxious and depressive. In particular, patients after surgery occur more frequently dysphoric symptoms, lack of motivation, loss of vital energy and other cognitive and somatic related concerning the area of the depressive spectrum [20]. On the cognitive level of these patients seem particularly focused on feelings of inadequacy, aggression and resentment, probably exacerbated by the onset of the disease. They emerge also general signs of anxiety such as nervousness, tension, anxiety and feelings of awe, fear and anger associated with manifestations of irritability, aggression and anger (hostility). Were detected inconveniences arising from the perception of bodily dysfunctions (somatization), thoughts, impulses and actions subjectively experienced as persistent and irresistible, of ego-dystonic or unwanted nature (obsessive-compulsive) [21]. Finally, it showed a marked distress in interpersonal interactions and negative expectations in social relationships (sensitivity) and more frequently a mode of thought marked by hostility, suspiciousness, grandiosity, self-reference, fear of loss of autonomy (paranoid ideation) and a schizoid type lifestyle characterized by emotional-affective isolation and introversion (psychoticism). Overall, the magnitude of the detected parameters should not be interpreted as the presence of specific syndromes, but rather predominantly subthreshold symptom aspects indicative of a condition of psychological stress, likely to be placed in relation with the main somatic pathology. The absence of previous family and personal medical history of psychiatric disorders might suggest that the psychopathological manifestations observed in our sample are the direct result or mediated by chronic somatic illness stress [22]. One of the most significant findings of this study is the finding that some psychiatric symptoms have a significant impact on patients' quality of life after surgery, especially in certain areas such as physical activity, the physical pain and the perception of general health. In fact, the presence of depressive symptoms such as lack of motivation, loss of vital energy, feelings of inadequacy and despair can worsen the limitations in daily life such as taking care of yourself, walking, climbing stairs, bending or play activities moderate or challenging physical. A particularly important element is the increased perception of pain reported by these patients in comorbidity with depressive or anxious symptoms [23,24]. In fact, an increased perception of pain is associated with an alteration of the perception of patients compared to their overall health, increasing the sense of dissatisfaction and reducing the resistance to the disease [25,26]. The data of our study do not allow determine the terms psychopathology affect the course of the disease (such as increased risk of relapse), the response to therapeutic interventions and compliance to treatment but surely allow us to consider the data that they contribute to worsen the quality of lives of these patients.

References

- 1) Grassi R, Meloni GB, Pignatelli di Spinazzola N, Di Grezia G, Rotondo A (2008) Apparato Gastroenterico: Esofago – Stomaco – Intestino. Capitolo 8 del libro Diagnostica per Immagini, Idelson-Gnocchi.
- 2) Grassi R, Rambaldi PF, Di Grezia G, Mansi L, Cuccurullo V, et al. (2011) Inflammatory bowel disease: value in diagnosis and management of MDCT-enteroclysis and 99mTc-HMPAO labeled leukocyte scintigraphy. *Abdom Imaging* 36: 372-381.
- 3) Gatta G, Di Grezia G, Di Mizio V, Landolfi C, Mansi L (2012) Crohn's disease Imaging: a review. *Gastroenterol Res Pract*: 816920.
- 4) Cappabianca S, Granata V, Di Grezia G, Mandato Y, Reginelli A, et al. (2011) The role of nasoenteric intubation in the MR study of patients with Crohn's disease: our experience and literature review. *Radiol Med* 116: 389-406.
- 5) Valentini V, Buquicchio GL, Galluzzo M, Ianniello S, Di Grezia G (2016) Intussusception in Adults: The Role of MDCT in the Identification of the Site and Cause of Obstruction. *Gastroenterol Res Pract*.
- 6) Di Grezia G, Gatta G, Berritto D, Iacobellis F, Reginelli A (2016) Crohn's Disease: Radiological Features and Clinical Surgical Correlation – G. Lo Re, M. Midiri – Springer 91-98.
- 7) A Faggian, M Muto, NL Pizza, F Iasiello (2014) ecografia endoanale 3D e della Risonanza Magnetica nello studio delle fistole anali. *Il giornale Italiano di Radiologia medica* 1: 955-960
- 8) Reginelli A, Di Grezia G, Gatta G, Iacobellis F, Rossi C, et al. (2013) Role of conventional radiology and MRI defecography of pelvic floor hernias. *BMC Surgery* 138: 553.
- 9) Cappabianca S, Reginelli A, Iacobellis F, Granata V, Urciuoli L (2011) Dynamic MRI defecography vs. entero-colpo-cysto-defecography in the evaluation of midline pelvic floor hernias in female pelvic floor disorders. *Int J Colorectal Dis* 26: 1191-1196.
- 10) Coppolino F, Gatta G, Di Grezia G, Reginelli A, Iacobellis F, et al. (2013) Gastrointestinal perforation: ultrasonographic diagnosis. *Crit Ultrasound J* 5 1:S4.
- 11) Thabet JB, Charfi N, Mnif L, Yaich S, Zouari L, et al. (2012) Emotional disorders and inflammatory bowel disease. *La Tunisie Medicale* 90: 557-563.
- 12) Unigastro- Coordinamento Nazionale Docenti Universitari di Gastroenterologia, Cap. 52 - Sindrome dell'intestino irritabile, in *Manuale di Gastroenterologia*, Roma, Editrice gastroenterologica italiana, 2007-2009, 470-479.
- 13) Derogatis LR (1994) Symptom Checklist-90-R: administration, scoring, and procedures manual, National Computer Systems, Minneapolis.
- 14) Hamilton M (1960) A rating scale for depression. *J Neurol Neurosurg Psychiatry* 23:56.
- 15) Apolone G, Mosconi P, Ware JE (1997) Questionario sullo stato di salute SF-36: manuale d'uso e guida all'interpretazione dei risultati. Guerini e Associati Milano.

- 16) Cohen RD (2002) The quality of life in patients with Crohn's disease. *Alimentary Pharmacology Therapeutics* 16: 1603-1609.
- 17) Casellas F, Arenas JI, Baudet JS, Fábregas S, Garcia N, et al. (2005) Impairment of health-related quality of life in patients with inflammatory bowel disease: A Spanish multicenter study. *Inflammatory Bowel Disease* 11: 488-496.
- 18) Magni (1991) Psychiatric diagnoses in ulcerative colitis. A controlled study. *The British Journal of Psychiatry* 158: 413-415.
- 19) Mike van der Have, Minderhoud IM, Kaptein AA, Leenders M, Siersema PD (2013) Substantial impact of illness perceptions on quality of life in patients with Crohn's disease. *Journal of Crohn's and Colitis* 7: 292-301.
- 20) Mittermaier C, Dejaco C, Waldhoer T (2004) Impact of depressive mood on relapse in patients with inflammatory bowel disease: a prospective 18-month follow-up study. *Psychosomatic Medicine* 66: 79-84.
- 21) North CS, Alpers DH, Helzer JE, Spitznagel EL, Clouse RE, et al. (1991) Do life events or depression exacerbate inflammatory bowel disease? *Annals of Internal Medicine* 114:381-386.
- 22) Rochelle TL, Fidler H (2013) The importance of illness perceptions, quality of life and psychological status in patients with ulcerative colitis and Crohn's disease. *Journal of Health Psychology* 18: 972.
- 23) Rubin P, Hungin APS, Chinn DJ, Dwarakanath D (2004) Quality of life in patients with established inflammatory bowel disease: a UK general practice survey. *Alimentary Pharmacology and Therapeutics* 19: 529-535.
- 24) Tarter RE, Joann Switala BS, Joseph Carrax MS, Kathleen L Edwards BS, et al. (1987) Inflammatory bowel disease: psychiatric status of patients before and after disease onset. *International Journal of Psychiatry in Medicine* 17: 173-181.
- 25) Quayle FJ, Lowney JK (2006) Colorectal Lymphoma. *Clin Colon Rectal Surg* 19: 49-53.
- 26) Işık A, Demiryılmaz I, Yılmaz I, Fırat D, Çimen O, et al. (2016) Effectiveness of Manual Knotting at Laparoscopic Appendectomy. *GMJ* 27: 19-20.

