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Quality of Life after Videolaparoscopic Segmentary Colectomyfor Intestinal Endometriosis

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1. Abstract

1.1. Background: Intestinal endometriosis (IE) is a chronic estrogen-dependent disease characterized by endometrial stroma outside the uterine cavity. It affects 10 to 15% of women and may present with pelvic pain and worsening quality of life. Treatment can be surgical, such as videolaparoscopic segmental colectomy (VSC).

1.2. Objective: To evaluate the quality of life of patients after VSC for treatment of intestinal endometriosis.

1.3. Method: This is an observational, longitudinal, and retrospective study carried out through a review of medical records and a telephone interview with patients who underwent laparoscopic segmental colectomy in a private hospital between 2016 and 2020.

1.4. Results: 43 patients were studied, of whom 30 (70%) complained of having impaired daily activities. Before surgery, dysmenorrhea intensity was classified as mild, moderate, severe, and very severe pain, with one patient (2.33%) classified as mild, three patients (6.98%) as moderate, 16 patients (37.2%) as severe, and 23 (53.49%) as very severe. As for pain during sexual intercourse, 13 patients (30%) reported dyspareunia. After surgery, 100% of the patients reported improvement in the complaint, referring to maintaining a normal routine after the VSC; of the 13 patients who did not feel that they had any impairment in their daily activities before the surgery, 2 still reported feeling more lively in their routine after having undergone surgery (P<.05). As for the intensity of dysmenorrhea after surgery, one (2.33%) patient classified it as moderate and 42 (97.67%) as mild (P<.05), indicating that there is a difference in pain intensity before and after surgery. Of the patients who previously reported dyspareunia, it was observed that 100% of them reported improvement after VSC with P=.0002.

1.5. Conclusion: CSV can improve the quality of life of patients with intestinal endometriosis.

2. Introduction

Endometriosis is a chronic disease dependent on the action of estrogen, in the endometrium stroma outside the uterine cavity, mainly in the pelvic peritoneum, ovaries, colon, rectum and bladder [1]. It is estimated that 176 million women worldwide suffer from endometriosis [2], representing up to 15% of women at an reproductive age. Endometriosis is associated with pelvic pain, dysmenorrhea, dyspareunia, and infertility [3, 4]; these symptoms worsen the quality of life and work [5, 6], causing financial losses due to absenteeism and decreased productivity [8].

Intestinal Endometriosis (IE) is a type of deep endometriosis characterized by endometrioma implants in the colon and rectum. It is estimated that 20% of women with endometriosis have an intestinal form and 90% have colorectal involvement [16]. There is still no consensus on the treatment option for IE [4].

In addition to low recurrence rate, but a higher rate of complications is also observed in up to 18% of the operated patients, such as anastomotic dehiscence or stenosis, fistulas, and pelvic collections (13).

The treatment of IE in some cases is surgical and is associated with

different levels of morbidity [9-11]. Several have shown significant results in symptom resolution and improvement in quality of life [12], in addition to low recurrence rate. However, a higher complication rate, up to 18% of patients operated, has been observed in some studies; complications include anastomotic dehiscence or stenosis, fistulas, or pelvic collections [13].

Videolaparoscopic Segmental Colectomy (VSC) is usually indicated for larger endometriomas, measuring 2 cm, with infiltrative capsules that go beyond the muscular layer of the intestine, that go beyond the main axis, or that affect more than one-third of the intestinal lumen, which can lead to intestinal lumen stenosis [13-15].

EI can worsen women's quality of life. Disabling pain leads to a reduction in happiness rates, absence from daily activities, and decreased performance at work. The indirect costs of the most severe cases in terms of productivity are twice the costs of treatment [20, 21] (Figure 1).

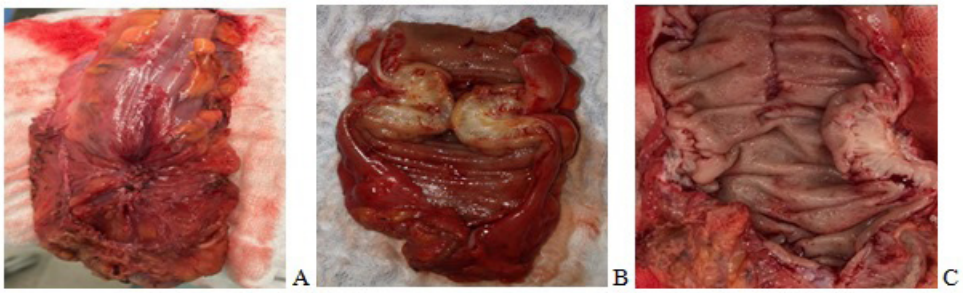

Figure 1: A- Surgical specimen with evidence of IE in sigmoid serosa. **B-** Surgical specimen with evidence of IE causing intestinal obliteration. **C-** Surgical specimen with evidence of IE affecting the serous and muscular layers of the rectum.

3. Purpose

The purpose of this study is to evaluate the quality of life of patients after surgical treatment by Videolaparoscopic Segmental Colectomy (VSC) for intestinal endometriosis.

4. Method

The study was observational, longitudinal, and retrospective; it was carried out at Hospital São Luiz Jabaquara Rede D'Or (São Paulo, Brazil) with patients undergoing VSC performed by the same surgical team between January 2016 and October 2020 and was conducted from January 2016 to October 2020 in accordance with the ethical standards determined by the Declaration of Helsinki of the World Medical Association, adopted in 1964 and reformulated in 1996.

The patients included in the study had undergone VSC, had a clinical and radiological diagnosis of IE, and were over 18 years of age, of reproductive age, female, and of various ethnicities. All patients operated on for a cause other than IE, patients whose medical records were not located, and all patients who refused to participate in the study were excluded from this study.

A review of the patients' charts and a telephone interview were carried out in the late postoperative period, with at least 3 months between the surgery and the telephone contact, for the administration of a standardized questionnaire with the patient to inquire about the quality of life after surgery for intestinal endometriosis.

4.1 Description of the Cases

We retrospectively analyzed the data of 51 patients with IE undergoing VSC. Eight patients were excluded due to the impossibility of telephone contact, resulting in a total of 43 patients studied.

In these patients, the mean age was 36.9 years (24 to 52 years), with symptom duration predominantly from 3 to 10 years in 21 patients (48%). Each patient in the study had several complaints, among which the most prevalent symptoms were pelvic pain (dysmenorrhea), intestinal bleeding, tenesmus, dyspareunia, diarrhea, and anal pain. Infertility was an associated condition in 10 patients (20.9%). As for pain symptoms, the most prevalent period was the perimenstrual period, and the most reported pain intensity was very intense in 23 patients (50.49%). Among the patients evaluated, it was possible to evaluate the size of the endometrioma in 31 patients, among whom they ranged from 1 to 6 cm with a median of 3 cm. It was possible to determine the distance from the anal edge in 33 patients; this distance varied between 6 and 18 centimeters from the anal edge. It was not necessary to perform protective ostomies in any of the cases.

As for the quality of life of patients in the preoperative period, complaints were analyzed regarding the impairment of daily activities due to symptoms; it was found that 30 (70%) of the patients involved in the study reported limitations in their daily activities (home care, shopping, studying), 27 (63%) had already been away from work for a certain period, 13 (30%) revealed having difficulties in sexual relations, and 13 (30%) reported difficulties in leisure activities (sports practice, travel, training).

4.2 Statistical Analysis

For continuous variables, the median and interquartile range were calculated; when there is no normal distribution and the mean is a confidence interval for the age variable, it has a normal distribution. For categorical variables, the number of patients in each category and their percentage are presented. The test applied to verify the association of the variables before and after the surgery was the exact McNemar test. For all analyses, the significance level considered is .05. R software version 4.0.3 (2020-10-10) was used to perform the analyses.

5. Results

Before VSC, patients classified the intensity of dysmenorrhea as

mild, moderate, severe, and very severe, with one patient (2.33%) classified as mild, three patients (6.98%) as moderate, 16 patients (37 .2%) as intense, and 23 (53.49%) as very intense. After VSC, one (2.33%) patient classified the pain as moderate and 42 (97.67%) as mild (P<.05), indicating that there is a difference in pain intensity before and after surgery.

Of the 43 patients whose data were analyzed, 30 (70%) complained of having impaired daily activities. Of these, 100% reported improvement in the complaint, referring to maintaining a normal routine after VSC. Of the 13 patients who did not feel that they had any impairment in daily activities before surgery, 2 still reported feeling better than before in their routine after having undergone surgery (P<.05).

Among the 13 patients who complained of having difficulties in leisure activities (physical activities, entertainment, travel), 12 reported improvement in this aspect after VSC, and 1 patient reported not noticing improvement. Among the 29 patients who did not complain of impairment in leisure activities, one patient with a previous complaint expressed feeling better after surgery when performing these activities (P<.05).

Regarding work performance, 27 (63%) of the patients had been absent from work at some point due to the intensity of the symptoms; of these, 25 patients reported improved performance at work on a daily basis and did not suffer more absences after the surgery. Of the 16 patients who did not complain of absence from work, 1 patient reported improved performance. In relation to this data, P>.05, which does not show statistical significance.

Of the patients analyzed, 13 (30%) reported dyspareunia; 100% of them reported improvement after VSC, with P=.0002.

In relation to patients who complained of infertility, the occurrence or nonoccurrence of pregnancy after surgery was analyzed. Initially, 10 patients (23.26%) reported that infertility was really a problem that influenced their quality of life, with failure after some treatment attempts. Another two (4.65%) reported having undergone treatment unsuccessfully, but they did not see infertility as a problem in their lives. Of the patients with complaints, 6 (14%) managed to conceive and four (9.3%) were still unsuccessful (P>.05).

Among the 43 patients involved in the study, 7 (16%) developed mild complaints in the late postoperative period, 4 of them due to changes in usual bowel habits (constipation or diarrhea) but without significant impact on quality of life. Of the others, 1 (2.33%) developed anastomotic stricture and underwent endoscopic dilation, showing improvement, and 2 other patients complained of sporadic tenesmus.

6. Discussion

IE affects women in the most productive phase of their lives. The symptoms, especially intense and disabling pain, negatively impact the quality of life of these patients.

The present study sought to analyze the impact of VSC on the quality of life of patients with IE. We understand that there are some limiting factors, such as the retrospective nature of the analysis and the lack of a second group of patients undergoing a surgical technique different from the one adopted. A comparison between surgical techniques could have broadened the discussions on the impact of surgeries in the treatment of this condition. However, we chose to use the preoperative status of each patient as a control to measure the results, and we believe this is also an adequate way to study the initial objective.

Although part of the published studies show a high number of postoperative complications in VSC, this study showed a small number of complications in the operated patients, most of them mild complications such as changes in bowel habits without significant impact on the patients' quality of life.

Bassi et al, [16] in a study with 151 patients of reproductive age with IE and symptoms of chronic pelvic pain, a questionnaire was administered before segmental colon resection and 1 year after. After segmental intestinal resection, there was a significant improvement in gastrointestinal, gynecological, and emotional symptoms, leading to an improvement in the quality of life of 90% of these patients, proving its effectiveness. This study presented results in agreement with those observed by Bassi et al. We observed that, of the 27 patients (63%) who reported absence from work due to the intensity of symptoms, 25 patients reported improvement in their daily work performance and did not suffer more absences after the surgery. Regarding other factors that contribute to quality of life, of the total number of patients analyzed, 13 (30%) reported difficulty in their sexual relations, and 100% of these patients improved in this aspect after surgery, which shows a robust improvement in a quality of life parameter.

Turco et al, [17] in a study with 50 patients with a mean age of 38 years with symptoms of dysmenorrhea, dyschezia, and dyspareunia submitted to segmental colon resection and filled out a questionnaire assessing their quality of life before and after the operation. After surgery, using the visual pain scale, pain improvement was noted in 74% of patients, as well as greater in self-confidence and improvement in interpersonal relationships, sex life, and work performance. In the current study, where the series was equivalent, with 43 patients undergoing a surgical approach, the response was even more impressive, showing a reduction in perimenstrual pain complaints to physiological levels in 42 patients, more than 97% of the women studied.

In this study, it was observed that 14% of the patients who had undergone surgery became pregnant in the postoperative period. This result did not reach significant relevance in the comparison between pre- and postoperative periods. Stepniewska et al, [18] in a study with women who underwent colectomy, observed a spontaneous fertility rate of 35% in the evaluation after four years of surgery (P<.05). We believe that, with a longer time segment, the fertility rate in the women operated on in the current study should still increase substantially, since the interval between surgery and the interview with the patients

was, in some cases, quite short.

This study, as well as others, suggests that the gynecological and intestinal symptoms of endometriosis, especially its colorectal infiltrative form, have a significant impact on patients' lives, affecting daily routine, leisure activities, employment, and even sexual intercourse. Although VSC is still considered an approach subject to a higher rate of postoperative complications, a significant improvement in the symptoms and in the routine of the patients involved after this surgery is evident.

7. Conclusion

Within the context in which this study was carried out, one can conclude that VSC for the treatment of intestinal endometriosis can improve the quality of life of patients.

Reference

1. Milone M, Vignali A, Milone F, et al. Endometriosis, technique and complications. World J Gastroenterol. 2015; 21(47): 13345-51.
2. Adamson GD, Kennedy SH, Hummelshoj L. Creating solutions in endometriosis: global collaboration through the World Endometriosis Research Foundation. J Endometr. 2010; 2: 4-6.
3. Olive DL, Schwartz LB. Endometriosis. N Engl J Med. 1993; 328: 1759-68.
4. Charatsi D, Koukoura O, Ntavela IG, et al. Gastrointestinal and urinary tract endometriosis: a review on the commonest locations of extrapelvic endometriosis. Adv Med. 2018; 2018: 3461209.
5. Abrao MS, Petraglia F, Falcone T, Keckstein J, Osuga Y, Chapron C. Deep endometriosis infiltrating the recto-sigmoid: critical factors to consider before management. Hum Reprod Update. 2015; 21: 329-39.
6. Setubal A, Sidiropoulou Z, Torgal M, Casal E, Lourenço C, Koninckx P. Bowel complications of deep endometriosis during pregnancy or in vitro fertilization. Fertil Steril. 2014; 101: 442-6.
7. Rogers PA, Adamson GD, Al-Jefout M, et al. Research Priorities for Endometriosis. Reprod Sci. 2017; 24(2): 202-26.
8. Simoens S, Dunselman G, Dirksen C, et al. The burden of endometriosis: costs and quality of life of women with endometriosis and treated in referral centres. Hum Reprod. 2012; 27(5): 1292-9.
9. De Cicco C, Corona R, Schonman R, Mailova K, Ussia A, Koninckx P. Bowel resection for deep endometriosis: a systematic review. BJOG. 2011; 118: 285-91.
10. Douay-Hauser N, Yazbeck C, Walker F, Luton D, Madelenat P, Koskas M. Infertile women with deep and intraperitoneal endometriosis: comparison of fertility outcome according to the extent of surgery. J Minim Invasive Gynecol. 2011; 18: 622-8.
11. Becker CM, Gattreall WT, Gude K, Singh SS. Reevaluating response and failure of medical treatment of endometriosis: a systematic review. Fertil Steril. 2017; 108: 125-36.
12. Byrne D, Curnow T, Smith P, Cutner A, Saridogan E, Clarck TJ. Laparoscopic excision of deep rectovaginal endometriosis in BSGE endometriosis centres: a multicenter prospective cohort study. BMJ Open. 2018; 8: e018924.
13. Young S, Burns MK, Di Francesco L, Nezhat A, Nezhat C. Diagnostic and treatment guidelines for gastrointestinal and genitourinary endometriosis. J Turk Ger Gynecol Assoc. 2017; 18(4): 200-9.
14. Wolthuis AM, Meuleman C, Tomassetti C, D'Hooghe T, de Buck van Overstraeten A, D'Hoore A. Bowel endometriosis: colorectal surgeon's perspective in a multidisciplinary surgical team. World J Gastroenterol. 2014; 20(42): 15616-23.
15. Milone M, Vignali A, Milone F, et al. Colorectal resection in deep pelvic endometriosis: surgical technique and post-operative complications. World J Gastroenterol. 2015; 21(47-51)
16. Bassi MA, Podgaec S, Dias JA Jr, D'Amico Filho N, Petta CA, Abrao MS. Quality of life after segmental resection of the rectosigmoid by laparoscopy in patients with deep infiltrating endometriosis in bowel. Obstet. 2020; 301: 217-28.
17. Turco LC, Scaldaferri F, Chiantera V et al. Long-term evaluation of quality of life and gastrointestinal well-being after segmental colo-rectal resection for deep infiltrating endometriosis (ENDO-RESECT QoL). Arch Gynecol Obstet. 2020; 301: 217-28.
18. Stepniewska A, Pomini P, Bruni F, et al. Laparoscopic treatment of bowel endometriosis in infertile women. Hum Reprod. 2009; 24(7): 1619-25.
19. Nnoaham K, Hummelshoj L, Webster P, et al. Impact of endometriosis on quality of life and work productivity: a multicenter study across ten countries. Fertil Steril. 2019; 112(4): 137-52.
20. Simoens S, Dunselman G, Dirksen C, et al. The burden of endometriosis: costs and quality of life of women with endometriosis and treated in referral centres. Hum Reprod. 2012; 27(5): 1292-9.