

# On Application Effect of Continuous Nursing in Postoperative Care for Patients with Laparoscopic Endometriosis

Shuang Han<sup>1</sup>, Dezhao Li<sup>2,\*</sup>

<sup>1</sup> Department of Gynaecology, Jingzhou Central Hospital, The Second Clinical Medical College, Yangtze University, Jingzhou, Hubei 434020, China

<sup>2</sup> Department of Anesthesiology, Jingzhou Central Hospital, The Second Clinical Medical College, Yangtze University, Jingzhou, Hubei 434020, China

\*Correspondence: 270882288@qq.com

**Abstract:** Objective: to discuss the application effect of continuous nursing in postoperative care for patients with laparoscopic endometriosis. Method: the research period is from January 2016 to December 2017. 85 patients with laparoscopic endometriosis who were received and treated in our hospital were chosen with the method of random numbers table. Besides, they were classified into control group (40 cases) and observation group (45 cases) with single blind method. The patients in the control group were intervened with conventional nursing, and continuous nursing was combined to intervene in the patients in the observation group. The health knowledge degree and 1-year relapse rate were compared. Results: the score of health knowledge degree of observation group ( $96.58 \pm 2.13$ ) was higher than that of control group ( $73.11 \pm 4.09$ ). During the one-year follow-up visit, 1 case relapsed in the observation group (2.22%), lower than that of control group (15.00%),  $p < 0.05$ . Conclusion: the effect of continuous nursing for endometriosis patients treated by laparoscopic surgery is significant, so its clinical promotion value is high.

**Keywords:** endometriosis; laparoscope; postoperative care; continuous nursing; effect

At present, laparoscopic surgery is often chosen to treat endometriosis (EM). Although it has good treatment effect, patients' postoperative stress response or negative emotion will affect the effect, or they cannot follow the doctor's advice to take medicines, thus leading to relapse [1]. Thus, except scientificity of operative treatment scheme, scientific and suitable nursing intervention is also required clinically so as to guarantee more comprehensive treatment and improvement of disease. To further improve clinic treatment effect of EM, this study aims to explore the clinical effect of continuous nursing intervention for EM patients receiving laparoscopic surgery.

## 1. Data and Method

### 1.1. General Data

The research period is from January 2016 to December 2017. 85 patients with laparoscopic endometriosis who were received and treated in our hospital were chosen with the method of random numbers table. All patients were diagnosed with EM through imaging [2]. The patients combined with complications and those with reproduction requirement as well as those with allergic constitution, drug allergy history and hormone intolerance were excluded. All patients were classified into control group (40 cases) and observation group (45 cases) with single blind method. The age of control group was 23-39, with the mean age of  $28.79 \pm 2.12$ . EM phase: Phase I 20 cases, Phase II 10 cases, Phases III 6 cases, Phase IV 4 cases. The age of observation group was 21-38, with the mean age of  $28.75 \pm 2.06$ . EM phase: Phase I 21 cases, Phase II 13 cases, Phases III 8 cases, Phase IV 3 cases. The comparison of both groups in age and EM phase had no statistical significance,  $p > 0.05$ . So, both groups had comparability. The research content did not violate medical ethics, and gained the consent of patients who signed the informed consent form.

### 1.2. Method

The patients in the control group were intervened with conventional nursing, and continuous nursing was combined to intervene in the patients in the observation group. The specific nursing content is as follows: (1) conventional nursing: gave conventional guidance and told patients the matters needing attention according to the conditions of disease, implemented various kinds of basic nursing, made diet planning and guidance and offered simple psychological counseling. (2) Continuous nursing intervention: 1) built continuous nursing intervention team. The hospital and the department should build the continuous nursing intervention team jointly. The team should include head nurse and professional nursing personnel to provide patients with 3-month nursing services. When the patients left hospital, medical history should be established for them, and the doctor-patient contact card should be distributed to the patients. The card should contain the contact information of the doctor in charge

and head nurse [3]. 2) Nursing implementation: a method: conducted telephone follow-up visit of patients once per month, gave them scientific and all-round health education and guidance and urged them to receive reexamination on time. b content: explained induction factors and relapse of EM, enhanced their attention to such aspects, told them dose and common adverse effects of various medicines, taught them to handle relevant adverse effects, explained the necessity of taking medicines for a long time, and enhanced them to follow doctors' advice; made sure the patients to take medicines as required, and did not increase or decrease dose at will or change medicines; directed them to formulate medicine taking memo, and let them set alarm clock to remind them of taking medicine; told them to pay attention to personal hygiene and prohibit bath in a tub and sexual life within 2 months after the surgery; told them to keep vulva clean. If colporrhagia occurs during the follow-up visit, perineum treatment method should be told to the patients. The patients must clean perineum with warm water every day, take a hip bath, and change underpants every day. Personal hygiene also should be valued during menstrual period, and it is required to change sanitary towel frequently. If the amount of bleeding is large, taking a shower is prohibited to prevent the increase of bleeding. Meanwhile, diet guidance should be given to patients. They should be told to have a balanced diet and eat the food rich in vitamin, cellulose and protein, and prohibit coffee and beverages. The patients should focus on rest and exercise such as jogging or taking a walk, and strenuous exercise is forbidden. They should choose suitable

aerobic exercise. The patients also should be told the impacts of negative emotion, and guided to vent their emotions and keep good mood.

### 1.3. Observation Indicators and Evaluation Criteria

EM health knowledge investigation scale which was prepared by the hospital was used to evaluate patients' health knowledge degree. The scale contains five aspects: professional disease knowledge, mental regulation, reasonable diet and exercise, personal hygiene and medicine taking knowledge. The score of each item is 20, and the total score is 100. The score is positively correlated with health knowledge degree.

After one-year follow-up visit, relapse rate of both groups was calculated.

### 1.4. Statistical Method

SPSS 23.0 statistical software was used to analyze data.

Measurement data were expressed with  $\bar{x} \pm s$  and tested with t test. Enumeration data were expressed with % and test with chi-square test.  $p < 0.05$  means there is statistical significance.

## 2. Results

### 2.1. Health Knowledge Degree

Health knowledge degree of observation group ( $96.58 \pm 2.13$ ) was higher than that of control group ( $73.11 \pm 4.09$ ),  $p < 0.05$ , as shown in Table 1.

Table 1. Health knowledge degree ( $\bar{x} \pm s$ , score).

Group	Professional disease knowledge	Mental regulation	Reasonable diet and exercise	Personal hygiene a	Medicine taking knowledge	Health knowledge degree
Observation group	$18.45 \pm 0.37$	$18.51 \pm 0.42$	$18.48 \pm 0.44$	$18.97 \pm 0.21$	$18.80 \pm 0.35$	$96.58 \pm 2.13$
Control group	$14.20 \pm 0.34$	$15.12 \pm 0.30$	$15.09 \pm 0.23$	$15.43 \pm 0.32$	$15.51 \pm 0.25$	$73.11 \pm 4.09$
t value	54.9034	42.3324	43.6910	60.9250	49.3004	33.7096
p value	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

### 2.2. Relapse Rate

During the one-year follow-up visit, 1 case relapsed in the observation group (2.22%), lower than that of control group (6 cases) (15.00%),  $X^2 = 4.5752$ ,  $p = 0.0324$ ,  $p < 0.05$ .

## 3. Discussion

EM results from active endometrium cells in the female planted outside endometrium. The common manifestation is dysmenorrhea or menoxenia, and it may even lead to sterility [5]. Wang Jianru [6] indicated in her research that, EM often attacks the female in the child-bearing period, with the morbidity of about 10-15%. The patients have to receive operative treatment to remove or reduce nidus.

At present, conventional nursing intervention is implemented for EM patients with treated by laparoscopic surgery. Such nursing is basic nursing content, and the implementation of each piece of work is passive. EM patients need to take medicines for a long time after the

surgery so as to thoroughly remove nidus tissues and prevent relapse. However, patients compliance for medicine taking will decrease with time, thus affecting their prognosis [7-9]. Continuous nursing belongs to an important content of holistic nursing. It pays attention to extending hospital nursing work to hospital discharge, and adopts health education and various recovery means to provide patients with scientific nursing services so as to make sure their disease control continues to be effective, urge them to take medicines on time for a long time and avoid relapse [10-12].

## 4. Conclusion

In conclusion, continuous nursing invention can improve health knowledge degree of EM patients and then reduce disease relapse rate.

## References

- [1] Leslie V Farland, A Heather Eliassen, et al. History of breast feeding and risk of incident endometriosis: prospective cohort study. *BMJ*, **2017**, 358: j3778.
- [2] Uba Backonja, Germaine M. Buck Louis. Overall Adiposity, Adipose Tissue Distribution, and Endometriosis: A Systematic Review. *Nurs Res.*, **2016**, 65(2): 151-166.
- [3] Pietro Gambadauro, Vladimir Carli, Gerg Hadlaczky. Depressive symptoms among women with endometriosis: a systematic review and meta-analysis. *American Journal of Obstetrics and Gynecology*, **2018**, 6(12): 941-948.
- [4] Camran Nezhat, Babak Hajhosseini, Louise P. King. Laparoscopic Management of Bowel Endometriosis: Predictors of Severe Disease and Recurrence. *JSLs*, **2011**, 15(4): 431-438.
- [5] Luciana Ferella, Juan Ignacio Bastón, Mariela Andrea Bilotas, et al. Active compounds present in *Rosmarinus officinalis* leaves and *Scutellaria baicalensis* root evaluated as new therapeutic agents for endometriosis. *Reproductive BioMedicine Online*, **2018**, 11(06): 22.
- [6] Farr R. Nezhat, Ido Sirota. Perioperative Outcomes of Robotic Assisted Laparoscopic Surgery versus Conventional Laparoscopy Surgery for Advanced-Stage Endometriosis. *JSLs*, **2014**, 18(4): e2014.00094.
- [7] D.M. Ribeiro, G.M. Ribeiro, T.P. Santos, et al. Pericardial Endometriosis as a Cause of Catamenial Precordial Pain - A Case Report. *The Journal of Minimally Invasive Gynecology*, **2018**, 25(7): 205-206.
- [8] Camran Nezhat, Babak Hajhosseini, Louise P. King. Robotic-Assisted Laparoscopic Treatment of Bowel, Bladder, and Ureteral Endometriosis. *JSLs*, **2011**, 15(3): 387-392.
- [9] Erica Schipper, Camran Nezhat. Video-assisted laparoscopy for the detection and diagnosis of endometriosis: safety, reliability, and invasiveness. *Int. J. Womens Health*, **2012**, 4: 383-393.
- [10] Innie Chen, Abdul Jamil Choudhry, David Schramm, et al. Type of pelvic disease as a risk factor for surgical site infection in women undergoing hysterectomy. *The Journal of Minimally Invasive Gynecology*, **2018**, 11(15): 1016.
- [11] Antonio Simone Laganà, Salvatore Giovanni Vitale, Maria Antonietta Trovato. Full-Thickness Excision versus Shaving by Laparoscopy for Intestinal Deep Infiltrating Endometriosis: Rationale and Potential Treatment Options. *Biomed Res Int.*, **2016**, 2016: 3617179.
- [12] Uba Backonja, Germaine M. Buck Louis, Diane R. Lauver. Overall Adiposity, Adipose Tissue Distribution, and Endometriosis: A Systematic Review. *Nurs. Res.*, **2016**, 5(2): 151-166.