Factors Influencing the Health Behavior of Patients in Their 20s and Older with Hysterectomy

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Abstract

Objectives : Uterine myoma occurs in 40-50% of women over the age of 35. Uterine myoma is mostly asymptomatic, but it causes certain abnormalities depending on the location, size and number of occurrences. Uterine myoma is small and medication is abailable if there are no symptoms, but surgery is possible in severe cases. Psychological and environmental factors are important for hysterectomy patients. Patients with hysterectomy need to manage postoperative health behaviors. This study is to identify factors that affect the health behavior of patients in their 20s and older

Methods : The 62 subjects of this study were patients with hysterectomy who visited the gynecology department of a general hospital in C region. This study conducted surveys and interviews from March 15 to May 5, 2022. For the estimated crossing ratio and statistical significance, a 95% confidence interval was obtained. Multiple logistic regression analysis was performed using a stepwise selection method for significant factors.

Results : The results of this study are as follows. Firstly, it was found that 61.2% of the case group was significantly higher than 32.2% of the control group in the age of 30s and 40s(95% Cl=1.27-5.16). The odds ratio is 1.36 times. Secondly, in the case of a family history, the case group was significantly higher than the control group(95% Cl=0.01-0.75). The odds ratio is 0.30 times. Thirdly, in the case of normal menstrual volume, 19.3% of the case group was significantly lower than 54.8% of the control group(95%, Cl=0.03-0.85). The odds ratio is 0.19 times. Fourthly, variables such as age, family history, amount of menstruation, menstrual pain, lower abdominal discomfort, abdominal pain, anemia and indigestion were included in the risk factors for myoma.

Conclusion : The results were confirmed that the health behavior applied in this study were effective. The research derived from this study is expected to contribute to alleviating uterine myoma.

Keywords: Health behavior, Patients, 20s and older, Hysterectomy, Family history

1.Introduction

Uterine myoma is a tumor that occurs in the smooth muscles that make up most of the uteurs and is a benign disease[1],[2]. In uterine myoma, one of the cells forming the smooth muscle of the uterus proliferates abnormally to form a uterine myoma[3].[4]. Uterine myoma occurs in 40-50% of women over the age of 35[3],[4]. Uterine myoma is mostly asymptomatic, but it causes certain abnormalities depending on the location, size and number of occurrences[5],[6]. Uterine myoma is small and medication is abailable if there are no symptoms, but surgery is possible in severe cases.[7],[8],[9].

Psychological and environmental factors are important for hysterectomy patients. Patients with hysterectomy need to manage postoperative health behaviors. Therefore, this study. This study is to identify factors that affect the health behavior of patients in their 20s and older.

2. Materials and Methods

2.1 Materials

The 62 subjects of this study were patients with hysterectomy who visited the gynecology department of a general hospital in C region. This study conducted surveys and interviews from March 15 to May 5, 2022.

2.2 Methods

In order to identify the factors that health behavior affects uterine resection, Logistic regression analysis used uterine myoma as a dependent variable and related factors as independent variables. For the estimated crossing ratio and statistical significance, a 95% confidence interval was obtained. Multiple logistic regression analysis was performed using a stepwise selection method for significant factors.

3. Results

3.1 General Characteristics of Subjects in This Study

Table 1 shows the general characteristics of the study subjects. It was found that 61.2% of the case group was significantly higher than 32.2% of the control group in the age of 30s and 40s(95% Cl=1.27-5.16). The odds ratio is 1.36 times. In the case of a family history, the case group was significantly higher than the control group(95% Cl=0.01-0.75). The odds ratio is 0.30 times.

Table 1. General Characteristics of Subjects in This Study

Variables	Case group N(%)	Cont group N(%)	OR	95% Cl
Age				
<30	7(22.5)	5(16.1)	1.0	
30-39	19(61.2)	10(32.2)	1.36	1.27-5.16
≥40	5(16.1)	16(51.6)	0.22	0.14-0.82
Family history				
Yes	18(58.0)	9(29.0)	1.0	
No	13(41.9)	22(70.9)	0.30	0.01-0.75
BMI				
<24	6(19.3)	7(22.5)	1.0	
24-29	10(32.2)	13(41.9)	0.90	0.21-8.39
≥30	15(48.3)	11(35.4)	1.59	0.32-5.74
Waking up at night				
Often	18(58.0)	14(45.1)	1.0	
Hardly	13(41.9)	17(54.8)	0.59	0.46-9.22
Total	31(100.0)	31(100.0)		

3.2 Comparison of Health Behavior Between Two Groups

Table 2 presents a comparison of health behaviors between the two groups. In the case of normal menstrual volume, 19.3% of the case group was significantly lower than 54.8% of the control group(95%, Cl=0.03-0.85). The odds ratio is 0.19 times.

Table 2. Comparison of Health Behavior Between Two Groups

Variables	Case group N(%)	Control group N(%)	OR	95% Cl

Menstrual volume				
Less	25(80.6)	14(45.1)	1.0	
Average	6(19.3)	17(54.8)	0.19	0.03-0.85
Heavy				
Menstrual pain				
Yes	20(64.5)	12(45.1)	1.0	
No	11(35.5)	19(54.8)	0.22	0.07-0.63
Lower abdominal discomfort				
Often	22(70.9)	14(45.1)	1.0	
Hardly	9(29.0)	17(54.8)	0.34	0.12-0.95
Abdominal pain				
Often	23(74.1)	11(35.4)	1.0	
Hardly	8(25.8)	20(64.5)	0.19	0.06-0.48
Urine				
Frequency	19(61.2)	13(41.9)	1.0	
Normal	12(38.7)	18(58.0)	0.46	0.32-5.74
Constipation				
Often	18(58.0)	11(35.4)	1.0	
Hardly	13(41.9)	20(64.5)	0.39	0.21-9.21
Anemia				
Often	23(74.1)	13(41.9)	1.0	
Hardly	8(25.8)	18(58.0)	0.25	0.18-0.63
Indigestion				
Often	19(61.2)	8(25.8)	1.0	
Hardly	12(38.7)	23(74.1)	0.46	0.27-0.91
Total	31(100.0)	31(100.0)		

3.3 Factors Influencing Health Behavior

Table 3 presents a logistic analysis of factors related to myoma. Multiple logistics regression analysis was performed using a stepwise selection method to significantly correlated variables with the incidence of myoma in the study results. Variables such as age, family history, amount of menstruation, menstrual pain, lower abdominal discomfort, abdominal pain, anemia and indigestion were included in the risk factors for myoma.

Table 3. Factors Influencing Health Behavior

Variables	OR	95% Cl
Age		
<30	1.0	
30-40	1.28	1.05-9.62
≥50	0.19	0.12-0.75
Family history		
Yes	1.0	

No	0.26	0.03-0.84
Amount of Menstruation		
Excessive	1.0	
Normal	0.17	0.08-0.76
Menstrual pain		
Yes	1.0	
No	0.21	0.14-0.91
Lower abdominal discomfort		
Often	1.0	
Hardly	0.32	0.06-0.82
Abdominal pain		
Often	1.0	
Hardly	0.18	0.04-0.65
Anemia		
Often	1.0	
Hardly	0.23	0.06-0.74
Indigestion		
Often	1.0	
Hardly	0.39	0.15-0.81

4. Discussion

This study is to identify factors that affect the health behavior of patients in their 20s and older. As a result, uterine myoma is related to genetic factors and if people have a family, they are 2.5 to 3 times more likely to develop uterine myoma. Therefore, it should be managed through regular checkups. This was found to be similar to the study of natural therapy in previous studies[2],[10]. Stretching and yoga can help because it strengthens muscle.

In this study, uterine myoma may occur if menstruation is excessive. If women have excessive menstruation, make sure their blood circulation is good through an abdominal compress, This is similar to previous studies[11],[12]. Patients with myoma need a lifestyle of aerobic exercise such as exercise and dumbbells. Steady consumption of multigrain rice and vegetarian nuts is also helpful. Therefore, the results were confirmed that the health behavior applied in this study were effective. The research derived from this study is expected to contribute to alleviating uterine myoma.

References

[1] Q. Hou, X. Li, L. Huang, Y. Xiong, D. Feng, Q. Zhang, X. Zeng, Y. Yang, T. Liu, Y. Li, Y. Lin, L. "Transvaginal Natural Orifice Endoscopic Surgery for Myomectomy, Can It be a Conventional Surgery?", Frontiers in Surgery, Vol. 9, 2022

[2] S. K. Jessica, Z. Qureshy, A. Ann,. Lazar, L. l. Chen, A. Jacoby, J. O. Anane, J. Lager "Rethinking Disparities in Minimally Invasive Myomectomy: Identifying Drivers of Disparate Surgical Approach to Myomectomy Between African American and White Women", Journal of Minimally Invasive Gynecology, Vol. 29, No. 1, 2021.

[3] Y. Chen, M. Fu, G. Huang, J. Chen, "Effect of the Enhanced Recovery After Surgery Protocol on Recovery After Laparoscopic Myomectomy: A Systematic Review and Meta-analysis", Gland surgery, Vol. 11, No. 5, 2022

[4] F. Guo, C. Jiao, K. Xu, C. Yang, X. Huang, Y. Lu, L. Xu, X. Chen, "Optimal Dose of Pituitrin in Laparoscopic Uterine Myomectomy: A Double-Blinded, Randomized Controlled Trial", Journal of Minimally Invasive Gynecology, Vol. 28, No. 12, 2021

[5] K. Takasaki, H. Henmi, U. Ikeda, T. Endo, A. Azumaguchi, K. Nagasaka "Intrauterine Adhesion After Hysteroscopic Myomectomy of Submucous Myomas", Journal of Obstetrics and Gynaecology Research, Vol 49, No. 2, 2023

[6] M. F. Olga, F. Katherine, C, Z. Zhao, L. Howard, L. Curlin, F. B. Lara, Harvey, L. T. Anderson, "Preoperative Hematocrit Level and Associated Risk of Transfusion for Myomectomy Based on Myoma Burden and Surgical Route", Journal of Minimally Invasive Gynecology, Vol. 30, No. 2, 2023

[7] S. Dagmar, E. A. Walid, and S. Erik, "Neighbourhood Environment Correlates of Physical Activity, A Study of Eight Czech Regional Towns", International Journal of Environmental Research and Public Health, (2011) Vol. 8, pp. 341-357.

[8] E. B. Larson, L. Wang, J. D. Bowen, W. C. McCormick, L. Teri and P. Crane, "Exercise is Associated with Reduced Risk for lncident Dementia Among Persons 65 Years of Age and Older", J of Ann Intern Med. (2006), Vol. 144, No.2, pp. 73- 81.

[9] A Oliver, Shergold, A. Norman, and K. Fleck, "Experimental lnvestigation Soft Solids by Sharp and Blunt Punches, with Application to the Piercing of Skin", Journal of Biomechanical Engineering Transaction of the ASME, (2005), Vol. 127, No. 5, pp. 838-886.

[10] B. Gardner, G. J. De Bruijn, and P. Lally, "A systematic Review and Meta-Analysis of Applications of the Self-reports Habit lndex to Nutrition and Physical Activity Behaviors", Annuals of behavioral Medicine, (2011), Vol. 42, No. 2, pp. 174-187.

[11] J. V. Santiago, "Clinical Report : Intensive Management of Insulin Dependent Diabetes: Risks, Benefits and Unanswered Questions", J Clin Endocrinol Metab, (2009), Vol. 81, pp. 102-105.

[12] G. J. De Bruijn, "Exercise Habit Strength, Planning and the Theory of Planned Behavior : An Action Control Approach", Psychology of Sport and Exercise, (2011), Vol. 12, pp. 106-114.