

Study on Prevention and Nursing of Perioperative Infection of Obstetrics and Gynecology

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ABSTRACT **Objective:** mainly to make an in-depth analysis on the prevention and nursing of perioperative infection of obstetrics and gynecology. **Method:** A retrospective analysis was made on 70 patients of obstetrics and gynecology, who were randomly classified into observation group and control group. The patients of control group were routinely nursed; the patients of observation were nursed on the basis of infection prevention, finally, the nursing effects of both groups were analyzed. **Results:** Infection can be effectively prevented by reasonably and preoperatively using antibiotics, however, attention should be paid to the using principle of antibiotics, only in this way, can the occurrence rate of infection be reduced. **Conclusion:** Enhancing the effective and characteristic nursing on the patients can reduce their infection ratio and occurrence rate of complication during the perioperative period of obstetrics and gynecology, and improve the patients' recovery.

KEYWORDS

Obstetrics
Gynecology
Perioperative period
Infection nursing

1. Introduction

The control and management of hospital infection of obstetrics and gynecology is one of those focus problems concerned by public health, therefore, improving the prevention and treatment level of infection is an important task of nursing, and also an important link to evaluate the treatment level of obstetrics and gynecology. For most hospital patients of obstetrics and gynecology, researching the infection features during their staying in hospital and targeted and effective nursing measures are important means to constantly improve the effects of operation and treatment of clinical patients of obstetrics and gynecology. To tell the truth, postoperative infection is always a rather complicated clinical problem. Currently, the using of antibiotics is one of the main means to effectively prevent postoperative infection. Clinical research shows that the infection probability of perioperative patients is usually higher than that of other time segments. Therefore, enhancing

the prevention and nursing of perioperative infection is of great importance [1-3].

2. Data and methods

2.1. General data

70 patients of obstetrics and gynecology treated in a hospital from September, 2011 to September, 2012 were chosen, and the patients' basic information, including age, type of disease, administration time, and use of medicine, etc. was also summarized and analyzed. According to different nursing measures, those 70 patients of obstetrics and gynecology were randomly classified into observation group and control group. There were 34 patients in control group, aged 22-58; average age was 36.9 years old; in observation group there were 36 patients, aged 20-62; average age is 42 years old. The difference comparison between the two groups in age and type of disease is of no statistical significance.

2.2. Method

The patients of control group were routinely nursed. Relevant nursing measures and treatment, including routine examination and anti-infection treatment, etc. were conducted based on the patients' actual situation.

3. Results

The patients of observation group were conducted by perioperative infection prevention and nursing interference,

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and the main nursing contents include six sectors as follows: (1) Instructions to hospital admission: before admission by the hospital, patients are inevitable to feel horror at the alien environment of the hospital, simultaneously, they will also feel doubted at the implementation of treatment measures, and easy to show negative emotions, such as uneasiness, and tension, etc., which may cause risk of infection during the course of operation, and affect treatment effect. Therefore, as nurses, they should explain to patients about the hospital condition, surgical treatment and nursing measures, and relevant precautions through active communication to effectively relieve patients' adverse emotions, enable patients to receive operation under the best condition, and promote the good realization of prognosis recovery. (2) Items of examination: Responsible nurses should make detailed explanations about the aim, significance, and precautions, etc., according to patients' requirements, in the meantime, they should also be able to accompany patients to complete some special examination tasks, such as blood sampling and test, etc., and inform the examination results to the patients and their relatives as soon as possible to effectively relieve the patients doubts and worries. (3) Enhancement of health and nutrition: As nurses, they should make effective guidance to patients, and promote them to forming good health habit and correct nutrition in-taking habit. After operation, they should encourage patients to take up off-bed activities, promoting effective recovery of relevant body functions. Moreover, they should also ensure the patients have a correct diet, try to secure the patients take in normal amount of nutrition under the circumstance of meeting the patients' tastes, so as to further strengthen the patients' resistance and immunity and hence improve the patients' condition and life quality. (4) Normalized using of antibiotic prophylaxis: There are numerous kinds of bacteria existing in women's vagina, most of which belong to pathogenic bacteria. During the course of operation or delivery, the change of vagina's micro-environment is easy to break the balance of bacterial flora, and lead to adverse action and effect. Therefore, in case of antibiotic administration, proper amount, time and situation should be taken as an important principle. Antibiotics should be used under the condition of no allergic skin-reaction, meanwhile, the infection caused by operational environment, operational ways and other factors should be integrative considered, so as to promote the handling and resolution of relevant problems. (5) Prevention and treatment of complications: Perioperative patients of obstetrics and gynecology have a high occurrence probability of complications, mainly including injury infection, postoperative cough, uroschisis, abdominal distention, and others, which should be dealt with according to specific situation. Abdominal distention: guide the patients to turn over their bodies, and arrange them to have off-bed activity, promote the recovery of their intestinal peristalsis function; uroschisis: According to conditioned reflex, let

patients listen to the sound of running water, or warm the belly with hot water bag, moreover, massage lower belly to stimulate the contraction of bladder smooth muscle; postoperative cough: the sedimentation of sputum may lead to pneumonia, when coughing, press both sides of the surgical incision, and try the best to cough out sputum; injury infection: In the event that the patient feel pain at the incision and body temperature rising after operation, examination should be made on the incision, and antibiotics should be used to implement anti-infection treatment, if the needle hole is swelling. (6) Prevention of postoperative infection: Hypoalbuminemia, cachexia, and anemia should be corrected before operation; bacteria-free operation should be conducted during operation to thoroughly stop bleeding and help to reduce tissue necrosis, use artificial synthetic absorbable suture, and avoid extraneous contamination.

4. Nursing and prevention of gynecology and obstetrics perioperative care

4.1. Pre-operative health education

For the just hospitalize patients, nursing staff should introduce ward facilities and all rules and regulations warmly, lead patient to be familiar with ward environment, inquire the state of an illness in details, understand the psychological status of patient, answer any questions put forward by patient patiently and establish good nurse-patient relationship to let patients accept the better treatment in the future. Medical staff should explain disease knowledge to patients in simple language to let patients have comprehensive cognition on his own status and complications and infection that could happen after operation to cooperate with medical staff better after operation to prevent and cure. At the same time, nursing staff should pay attention to carry out psychological education to clear up the tension, anxiety and fear etc. Bad psychological factors to strengthen his confidence on surgical treatment and overcoming the disease [4].

4.2. Nursing of postoperative complication

For the patients of obstetrics and gynecology, surgical treatment is only one stage of the whole therapeutic process. Whether the postoperative nursing is appropriate or not is very important for the patients of obstetrics and gynecology. Nursing staff should maintain high sense of responsibility and help patients promote the confidence of fighting disease with the most quality nursing service. It can enhance the effect of surgical treatment of patients and test the professional knowledge and nursing operation level, so while nursing staff prevents infection, he should strengthen nursing intervention and early detect and early diagnose the postoperative complications and adopt the effective nursing measures to intervene. Firstly, the ward environment should be ensured to be quiet, clean and hygienic to provide one comfortable and cozy therapeutic

environment for patients and let patients maintain good attitude to cooperate the work of medical staff actively. Assist the patients of postoperative abdominal distention in carrying out bed activities, turnover at fixed time or sit up and help patients exercise out-of-bed activities to promote gastrointestinal peristalsis [5]. The abdomen of urosche-sis can be massaged to stimulate the constriction of bladder smooth muscle or utilize conditioned response to let patients listen to water sound more and the method of acupuncture point can be adopted to promote the micturition of patient. Postoperative cough patients are afraid of coughing because of worrying about the pain of cut so that sputum cannot be discharged and it can easily filled up in the lungs to cause pneumonia. Nursing staff should advise patients repeatedly to press two sides of cut by two hands when patients cough to discharge sputum successfully.

4.3. Strengthen the hygiene and nutrition of perioperative period

Nursing staff should lead patients to form one good hygiene habit and correct nutrient intake habit. Patients must brush teeth and wash mouth strictly after meal and take a bath and put on clean clothes timely under the permission of condition and change clothes frequently. Rinse genitals every day to keep clean and encourage maternal to off-be activities as early as possible under the support of family member after operation to let the uterus to be self-healed. In aspect of eating, nursing staff should communicate with family member for diet nutrition and collocation of form to ensure that it can meet the taste of patients and nutritional intake required by organism and strengthen the immunity of maternal to promote the recovery [6,7].

4.4. Standardize the use of preventive antibiotics

The number and the type of bacteria in the vagina of normal woman are more. Except for lactobacillus, they are belonged to conditioned pathogen category. Flora is disordered because of the change of microenvironment of vagina due to operation or childbirth, so when the antibiotics is used, the principle of adequacy, timeliness, appropriate amount must be followed and follow strictly the existing high possibility of reasons of causing infection such as surgery, the degree of surgery, the environment of operation and the precondition of allergen-free skin test of patient etc.

5. Discussion

Based on surgical treatment, perioperative period includes the preoperative, intraoperative and postoperative the whole phase. The infection happened to patient is very serious. The infection factors mainly include the out-of-hospital and hospital acquired infection conditions. The control of infection factors is especially important. The effective implement of control has great influence on operation result and prognosis. Good infection prevention and

nursing effect has important role on the healing of patient's illness. During the process of perioperative nursing of gynecology and obstetrics, triggered various infections and complications have very serious influence on physical and mental health of patients and infant to promote the effective implement of patients through effective infection prevention and strengthen the rehabilitation rate of patients under the implementation of good nursing intervention to obtain satisfactory effect. In the cases of the group, 34 cases of patients of control group obtain good results in infection rate, body temperature, hospital stays etc. sides through prevention of infection and good intervention of nursing intervention. Compared with control group, the nursing efficacy is more superior, so paying attention to prevention and nursing of infection during perioperative period of gynecology is the effective measures to promote healing of patients' illness. At the same time. Effective control and application on the use of antibiotics and prevention of complications to promote the realization of the best care treatment to the greatest extent [8].

6. Conclusion

In conclusion, the gynecology and obstetrics infection runs through the whole perioperative period. The infection factors mainly include exogenous infection and endogenous infection two sides. Exogenous infection factor includes too long operation time, incomplete preparation, not strict disinfection, aseptic technique during operation, difficult abdominal cavity drainage and iatrogenic infection etc. Endogenous infection includes the poor self-health status such as obesity, malnutrition and being suffered from high blood pressure, chronic diseases and infection caused by low immunity of patient himself, so the meaning of strengthening quality nursing during the perioperative period of obstetrics and gynecology is very important. However the most ideal preventive medication way is to choose the most appropriate antibiotics, use the minimum dose to reach optimal efficacy through the most shortest treatment and the most appropriate mode of administration.

References

1. Yu XX. The prevention and nursing of perioperative infection of obstetrics and gynecology. *Journal of Nurse Training*. 2011;21:297-299.
2. Guo M, Xin W, Zhang MJ. The preventive application of antibacterial agents in the perioperative period of obstetrics and gynecology. *Chongqing Medical Journal*. 2011;20(15):2171-2173.
3. Pan ZY. Analytical investigation of common problems of gynecological and obstetrical nursing. *Medical Information*. 2011;9(11):1029-1031.
4. Huang LW, Zhou HY, Wang YL. Nursing risk analysis and study of common nursing problems of obstetrics and gynecology. *Medicine Theory and Practice*. 2012;28(13):747-749.
5. Sun JF. Cause analysis and prevention of nursing risk an

- potential safety concerns of obstetrics a gynecology. *China Practical Medicine*. 2012;11(15):1275–1277.
6. Chen NN. Existing problems and countermeasures of nursing work of obstetrics and gynecology. *For All Health*. 2012;19(3):162–164.
 7. Xu CQ. Observation of the effect of clindamycin phosphate injection preventing postoperative infection. *Progress of Modern Obstetrics and Gynecology*. 2010;12(5):216–217.
 8. Sun X. Prevention and nursing strategy of the related pneumonia of ventilator. *Chongqing Medical Journal*. 2009;18(4):497–499.