

Study on the Risk Factors of Nosocomial Infection in Patients with Neurology

Hongjiao Wang

Department of Neurology, the Second Affiliated Hospital of Qiqihar Medical College, Qiqihar City, Heilongjiang Province, 161000, China

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Abstract: This article discusses the risk factors of nosocomial infections in neurology patients, and puts forward preventive measures on this basis. Through the method of retrospective analysis, the various risk factors of infection in neurology patients in our hospital were found, and the risk factors of nosocomial infection in neurology patients were related to age, location, hospitalization time, invasive operation and so on. Based on the analysis of risk factors for nosocomial infections in patients with neurology, targeted preventive measures are proposed. Hope to effectively reduce the hospital infection rate of patients.

1. Introduction

With the continuous development of China's economy, people's living standards have been effectively improved. People also pay more attention to their own health problems, especially the attention to diet and the strengthening of exercise, making people's life expectancy signs longer than before. However, there are still many people with poor health awareness, which has continuously increased the incidence of cerebrovascular and hypertension, and the hospitalization rate of their hospitals has also increased significantly. At the same time, neurology is mostly severe and critical patients. These patients are characterized by high age, relatively long course of disease, longer time in bed, and other diseases. And there are different degrees of nervous system dysfunction and consciousness disorders. Such patients are prone to infection during medical treatment and hospitalization, which increases the psychological burden, physical pain and financial burden of the patient, and even more serious risks of disability, hemiplegia and disability.

2. Analysis of Risk Factors for Hospital Infection

Nosocomial infection and the relationship between the infection site and the primary disease. The main sites of infection are the respiratory tract and urinary tract. Respiratory tract infections are mainly because the tracheal intubation destroys the defensive barrier of the epiglottis, so that the secretions of the respiratory tract cannot be discharged, and it is easy to block the lower respiratory tract and increase Probability of infection. In addition, the patient has a disturbance of consciousness, and the cough and swallowing reflex are weakened, which hinders the discharge of airway secretions and breeds bacteria. The main reason for urinary tract infections is the continuous indwelling catheter, and it may be caused by incontinence with the patient and causing incontinence. Infections in primary diseases are mainly cerebral hemorrhage and cerebral infarction, which are the result of a combination of various factors, mainly for patients with cardiovascular and cerebrovascular diseases who are older, more ill, have a longer hospital stay, and are often accompanied by disturbance of consciousness.

Patients with a history of smoking and underlying diseases are significantly more likely to develop infections than patients without a history of smoking and without underlying diseases. The reason is that these patients are affected by factors such as age, which gradually reduces their own immunity and the function of various organs. Their ability to resist bacteria is also lower than that of young people, and it is prone to hospital infections. At the same time, invasive operations mainly include: Intubation, trachea, gastric tube insertion, mechanical ventilation, indwelling catheter, etc. are all invasive procedures that may be encountered by inpatients in the neurology department. It

can damage the barrier effect of the mucosa, thereby increasing the incidence of hospital infections. In addition, some aseptic operations, machinery and medical equipment pollution will also increase the incidence of hospital infections to a certain extent.

Although modern medicine is developing rapidly, many diseases still have difficulties in diagnosis and treatment in the face of neurological diseases. Therefore, the condition of inpatients in the department of neurology is often relatively complex and changeable, the recovery of the condition is relatively slow, and the length of hospitalization is relatively long. At the same time, due to the older age of the inpatients in the Department of Neurology, the body's immune function is poor, and there are more chances of nosocomial infection. For patients hospitalized in the department of neurology, if a hospital infection occurs, it not only makes the disease more complicated and affects the rehabilitation of the patient, but also causes the patient to receive more medical and nursing measures, affects the quality of life of the patient, and aggravates the patient and his family Economic and spiritual burden. At the same time, the long-term use of antibacterial drugs not only increases the chance of multidrug resistant bacteria, but also increases the difficulty of treatment for clinicians. Therefore, actively controlling and reducing the incidence of nosocomial infections is of great significance to the improvement of medical quality.

The main factors causing infection are divided into the following aspects: age factor. With the increase of age in many patients, the physical mechanism, immunity, and resistance have declined. In addition, many patients use indwelling gastric tube nasal feeding for nutritional supply during their lives, and respiratory and gastrointestinal infections are more likely to occur. The infection rate of patients with smoking and drinking history and underlying diseases was significantly higher than that of patients without smoking and drinking history and without underlying diseases. This is because these patients have poor immunity, hypofunction of various organs, low defense ability against bacteria, and are prone to occur infection. Use antibiotics in large quantities. In terms of treatment, antibiotics can inhibit the reproduction of bacteria, and in the treatment, they can achieve good therapeutic effects, but antibiotics will also have a certain effect on the growth of normal flora in the human body, leading to dysbiosis of the human body. When too many antibiotics are used After that, human fungal colonies will gradually develop a certain resistance to antibiotics, and its subsequent treatment effect will be affected. Hospitalization time. Due to the concentration of hospital diseases and excessive pathogens, the longer the patient stays in the hospital, the more medical expenses will be, and the greater the chance of infection, and even many patients will die due to disease infection. Nosocomial infections are generally divided into endogenous infections and exogenous infections. Endogenous infection is mainly caused by the disease, the body's immune system ability is reduced, and the internal environment is dysregulated, which causes the patient to cause infection normally. And there are many sources of exogenous infections, such as other hospitalized patients, accompanying staff, medical staff, and indwelling catheters, which may bring other pathogenic bacteria, which can lead to patient infection. Impaired consciousness: Patients with impaired consciousness have weakened cough and swallowing reflex, which hinders the discharge of airway secretions, and it is easy to breed bacteria. In addition, patients with consciousness disorders have unstable body water electrolytes and acid-base balance, and various complications can occur, which reduces the patients' ability to resist infection. Invasive operation: tracheal intubation, tracheotomy, gastric tube insertion, mechanical ventilation, indwelling catheter, etc. are all invasive operations that may be encountered by patients in neurological hospitalization, which can damage the mucosal barrier and increase hospital infection Incidence. In addition, failure to follow aseptic procedures can lead to the contamination of medical equipment and medical devices, which can also cause hospital infections. Hospitalization time: This study shows that the incidence of infection in patients with hospitalization time > 20d is significantly higher than that in patients with <20d. This is because the long hospitalization time indicates serious illness and the probability of cross infection increases, so the incidence of infection is high.

3. Related Preventive Measures for Nosocomial Infection

The inpatients in the department of neurology are susceptible to nosocomial infections, so

effective preventive measures must be taken to reduce the infection rate. The risk factors for hospital infection include endogenous factors and exogenous factors. The endogenous factors are mainly the age of the patient, history of smoking and drinking, combined with underlying diseases, and there are consciousness disorders; the exogenous factors are mainly invasion Sexual manipulation and irrational application of antibacterial drugs are the main reasons for nosocomial infections in neurology patients.

To provide patients with a beautiful and comfortable environment as the basic guarantee of the hospital, first of all, to provide patients with a clean environment, do a good job of disinfection and isolation measures of various departments; according to the pollution of the environment, choose the appropriate disinfection Products, and refer to the manufacturer's instructions and measurement, do a good job of disinfection. Carry out the work of ventilating the window, master the time of ventilation, and reasonably arrange the frequency of ventilation, not less than 2 times a day. Enhance the doctor's hygiene awareness, wash hands and disinfect before and after each operation. At the same time, it is necessary to increase hand hygiene facilities in the ward; When homologous pathogens occur, isolation work should be carried out, and special nursing staff should be set up to reduce the chance of poor infection. For urinary infections, the urethra and perineum should be cleaned and disinfected every day, and a closed disposable drainage bag should be used to make the drainage more smooth. At the same time, it is also necessary to tell the patient to drink more water at ordinary times. When the condition for pulling out the urinary catheter is reached, the ureteral catheter should be operated lightly to avoid damage to the urethral mucosa.

Do a good job of nursing work. First of all, with the permission of the disease, carry out the work of turning back and patting the patient. This is an important measure to prevent and control the infection of respiratory tract infection. Secondly, perform oral care every four hours and perform Supervise the changes of sputum in the oral cavity before and after the operation. If excessive sputum occurs, implement mechanically assisted sputum discharge. Finally, adopt aseptic operation, strictly implement hygienic habits, prevent cross-infection, and monitor patients, grasp the complications of underlying diseases, find the disease in time, and control the deepening of the disease. In addition, health education knowledge needs to be instilled to effectively promote good hygiene habits to shorten the hospitalization time of patients, reduce the erosion of pathogens in the environment, and reduce the suffering and morbidity of patients. So that patients with neurology can return to health as soon as possible. Reasonable application of antimicrobial drugs. Medical staff should arrange antimicrobial drugs reasonably. During the clinical treatment stage, Jining pathogens should be cultivated in time, and drug sensitivity tests should be conducted. The chance of repeated infections.

In this regard, the hospital can proceed from the following aspects to prevent: strengthen ward management. During the hospitalization of the patient, the nursing staff should strengthen the disinfection and hygiene management of the hospital, keep the patients in the ward well ventilated, open the window every day to ensure air circulation, and scrub the ground and tabletop with chlorine-containing disinfectant every day. To classify towels, mops, etc., for the ward environment, ultraviolet light should be used for disinfection daily, and visits and accompanying staff should be restricted. Establish a perfect disinfection system. Hospital leaders should fully recognize the importance of infection prevention, strengthen disinfection awareness, and continue to establish a complete disinfection system. Any volunteers should strictly follow the disinfection system. Before operation, they should wash their hands carefully and do a good job in disinfection. Try to avoid cross-infection, and carry out disinfection training for family members or accompanying staff of patients to master the correct hand-washing and disinfection methods to reduce the incidence of infections. Reasonable use of antibiotics. Hospitals should strengthen training on drug use knowledge for volunteers, regularly hold relevant knowledge lectures, and let medical staff understand the harmfulness of antibiotic abuse in detail. In daily work, clarify the time and interval of drug administration, and strictly follow the regulations to administer drugs in order to inhibit patient tolerance. Produced by medicinal bacteria. In short, because the neurology department has certain specialties, it is the most likely high-risk department in the hospital to produce infections.

Therefore, in the daily care process, the nursing staff should actively take preventive measures for infection, continuously strengthen the patient's life improvement monitoring and ward patients Disinfection work, and minimize the number of patients hospitalized, thereby reducing the incidence of hospital neurology infections.

Most neurological patients are severely ill patients, and their ages cover a wide range. During the period of illness, their resistance and immunity have declined. As the hospital is a disease gathering place, there are many pathogens and it is more likely to cause infections. Therefore, in daily care, Nursing staff should fully realize the importance of infection prevention.

The first is to carry out training and education of hospital staff to prevent hospital infections based on the characteristics of hospital infections in neurology. At the same time, we must strengthen the training and management of hospital infection knowledge for patients and accompanying persons to reduce visits and accompany. Strengthen the management of the wards and attach importance to the disinfection and isolation system, regularly open the windows of the wards effectively to keep the room clean, and regularly clean and disinfect the air-conditioning filter to reduce the bacteria content in the air. Strict aseptic technique operation, aseptic technique operation procedures should be carefully implemented for invasive operations or invasive procedures should be minimized, and oxygen humidification bottles and oxygen joints should be strictly sterilized; regular replacement of urine bags for patients with indwelling urinary catheters, timely assessment of whether Pull out the urinary catheter to minimize the indwelling time. Strengthen basic nursing, strengthen the training of basic nursing for new nursing staff, conscientiously do morning and evening nursing, and keep patients' beds clean and dry. Clinicians are required to master the principle of rational use of antibacterial drugs, and nurses must understand and master the rational combination and compatibility of different drugs, and strictly follow the instructions of the doctor according to the route, frequency, interval and half-life of the antibacterial drugs. Strengthen standard prevention, do good hand hygiene, and equip with corresponding hand washing facilities and rapid hand disinfectants, skin care products, so that medical staff can voluntarily wash their hands voluntarily.

4. Conclusion

In summary, actively stabilizing the blood glucose level of patients, reducing and standardizing the application of invasive diagnosis and treatment measures, rationally using antibacterial drugs, shortening the hospitalization time of patients, and paying attention to improving the immune function of patients can reduce the incidence of nosocomial infections, improve clinical efficacy and patients Quality of life.

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