

Research on the Clinical Nursing Observation of Infant Severe Pneumonia

Yanhua Guan^{1, a} Daoxin Jin^{1, b}

¹ Luohe Medical College, Luohe City, Henan Province, China, 462000

^a email:

^b email:

Keywords: Infant, Severe Pneumonia, Clinical Nursing, Treatment

Abstract: Severe pneumonia in infants is a common disease in clinic, and it refers to the lung disease accompanied by other complications in other organs and systems, such as heart failure, respiratory failure, microcirculation disturbance, shock etc., and some patients even accompany with empyema, pyopneumothorax and sepsis. Data report displays that infants with severe pneumonia incidence accounts for 24.0%-56.0% of the number of pediatric internal medicine. Mortality of severe pneumonia accounts for more than 20% of children's mortality, so it is one of the the leading causes of infant death in our country. After the onset of severe pneumonia in infants, it mainly manifests in empyema, pyopneumothorax, pulmonary bulla, bronchiectasis. At the same time, lacking a closely observation for the changes in the condition and failing to take effective nursing measures as early as possible are easy to cause the child to die in a short time. In this paper the infants were diagnosed as children with acute upper respiratory tract infection and the following are analyzed in detail.

Case Introduction

Infant patients, female, 8 months, hospitalized in April 23, 2015. Principle action: Cough 3 days, fever, crying for 1 days. (1) the present history. Her family said she started coughing under no obvious inducement on April 20, 2015, appearing Paroxysmal cough, 1-2 sound every time, not frequent at the beginning, no spasmodic cough. In April 22nd, to our hospital outpatient service. At that time, the infant has a fever symptom with a maximum body temperature 38.2, accompanied by crying, stridor, after given fever medicine treatment, the body temperature gradually returned to normal. In order to further diagnose, receiving the infant with "bronchitis" into our department, in the course of treatment, there is no rash, chills, vomiting, diarrhea and other symptoms. After onset, the infant's spirit, sleep are normal. (2) previous history. The infant's usually health is in general, there is no hepatitis, tuberculosis and other infectious diseases, no blood transfusion, major surgical trauma history, no drug, food history, timely vaccination. (3) personal history. Children birthed in full-term, midwifery, no birth asphyxia history. After birth, with breastfeeding and mixed feeding, her weight increased, getting a normal growth and development. (4) family history. After physical examination, parents have no the corresponding history.

Physical examination: T 36.9 DEG C, R 60 times / min, P 160 beats / min, height 72cm, weighing 6.5kg, normal development and nutrition, moderate expression, cooperating with the investigation, poor spirit. Skin mucous membrane: The skin is slightly pale, no rash, piebald, yellow

dye, subcutaneous hemorrhage and there is no lymph node enlargement. Head and organs: Head has no abnormality, conjunctiva has no hyperemia, double pupil is the same big and round with a diameter of 3.0mm, lips less cramping. Neck: Neck is soft with no resistance. Lung: The breath is rapid with mild Three Depression Sign. The two pieces of lung have a similar degree of respiratory motion, and the vocal fremitus has no enhancing and weakening. The two pieces of lung have a piece breath sound with a lot of moist rales and wheezing. Heart: heart rate of 160 beats per minute, the law together. The abdomen is soft, and the tone of voice is regular.

Supplementary examination: Routine in children: WBC $12.99 \times 10^9/L$, RBC $4.14 \times 10^{12}/L$; HGB $103g/L$, PLT $485 \times 10^9/L$, N51.1%, L44.2%. Initial diagnosis: severe pneumonia associated with Chlamydia infection.

Therapeutic Method

The child was diagnosed with severe pneumonia, after the approval of the superior doctor, using the broad spectrum antibiotic and azithromycin to conduct the treatment. In the treatment process, we checked the liver function, C reactive protein, pneumonia. Giving symptomatic treatment for the child, such as anti infection, phlegm, cough, asthma and improve body circulation. Simultaneously, in the course of treatment, we told the family to strengthen the nutritional diet of the child, and informed the family of the disease, treatment, prognosis and treatment costs, etc.. The family understands the method and cooperates with the treatment.

Nursing

For the clinical manifestations and treatment of the child, we implemented the appropriate nursing for the children. (1) routine nursing care. Environmental care: After admission, the nurse created a good environment for the patient, maintaining an appropriate temperature and humidity. To keep the environment quiet, clean, to ensure that children have enough sleep, in the treatment, it declined to visit to avoid cross infection. Position transformation: Abdominal breathing is the main respiratory method in infants and young children, so it can take high position to reduce the diaphragm burden. For children with abdominal distension and breathing difficulties, it can take a half position, which is more conducive to the excretion of secretions. Often helping children adjust and change position to avoid crying and reduce oxygen, this is more conducive to the rehabilitation of children. Skin care: Nurses should told family members to allow child to drink more water, pay attention to keep warm, change clothes and sheets of children regularly, use hot towel to wipe the sweat, keep the skin dry, alleviate discomfort. For a rash, yellow dye, edema, it should analyze the reasons and take immediate measures to deal it. Dietary regulation: As the age is relatively small, the growth and development of infants is relatively strong, so it should be as much as possible to make the patient's diet with high nutritional value, avoiding greasy, spicy food, encouraging children to eat more rice, fruit juice, add enough heat to ensure airway moisture. (2) pathogen treatment and nursing: Closely observing the vital signs of the infant. After admission, the patient should be arranged in the intensive care unit, where is equipped with central oxygen inhalation, negative pressure suction, ECG monitoring and other rescue equipment. At the same time, children with severe pneumonia are prone to various complications, for example: Hypoxia. Therefore, after admission, it should closely monitor the blood oxygen saturation, understand the spirit, complexion, and the symptoms of the infant body, etc. Strengthen the monitoring of pathogens, and according to the monitoring results to select sensitive antibiotics, adjusting the dosage of the drug according to the recovery of the patient. Strengthen the pharmaceutical care for the infant. In the treatment

process, it should closely control the infusion speed, avoiding dropping too fast to aggravate heart failure and pulmonary edema, especially for children with heart failure, it should not be too much fluid input. Correct hypoxia: hyoxemia has greater harm on severe pneumonia in infants and young children, if not promptly corrected in the early stage of disease, it is easy to produce irreversible damage. Therefore, in the process of treatment, the nurse should correct the anoxic condition of the children in time, and use the nasal duct to take oxygen.

Results

At 1 day after admission , the infant cough was relatively frequent, the cough accompanied by vomiting, and laryngeal stridor was slightly reduced. Dyspnea was relieved obviously, and the mental state was better than that before going to the hospital. The disease of the child belongs to the community acquired pneumonia which has a relatively severe symptom. Considering the presence of mixed infection, we continued to give antibiotics treatment and close observation of the disease according to the doctor's advice. At 2 days after admission, the cough, shortness of breath were reduced, no purple clamp, breathing difficulties and other symptoms, and the infant was diagnosed with severe pneumonia, continuing to treat according to the original plan, observing the change of the illness, following the doctor's advice. At 3 days after admission, the cough, shortness of breath and other symptoms has been further reduced. At 4 days after admission, pneumonia four examination found Chlamydia pneumoniae IgM positive, considering chlamydia pneumonia infection, we immediately used anti infective drugs, such as PiperacillinSodium and Sulbactam Sodium for Injectio and Azithromycin. At 5 days after admission, continuing to consolidate the treatment. At 6 days after admission, with occasional cough and no shortness of breath, and the infant's condition is improved. Family requested discharge, and the department decided to grant discharge, prescribed by the doctor.

Conclusion

Infant severe pneumonia is a common disease in pediatrics, and the disease has a great harm on the child health. Pediatric patients' respiratory circulatory function is not perfect, and their body immunity and resistance is relatively poor, causing the pediatric patients' respiratory tract is easily infected. Once the disease occurs, the disease changes are relatively quickly, it is easy to produce a variety of symptoms, so the severe cases will threaten the lives of children. Therefore, in the treatment of severe pneumonia of infants, nurses should have a high sense of responsibility and keen observation ability to give children a reasonable treatment and care, ensuring that the child can be cured and discharged.

References

- [1] Ji Hui, Wang Fengzhi, Chen Lin. 26 cases of severe pneumonia in infants and young children with [J]. general nursing care, 2011,19:1724-1725.
- [2] Jiang Sailin, Zhan Yamei. Nursing cooperation in the treatment of severe pneumonia in infants and young children with [J]. Jilin medicine, 2007,10:1169-1170.
- [3] Huang Jianzhen. Nursing of infants with severe pneumonia in infants and young children [J]. Guangxi Journal of medicine, 2008,03:441-442.
- [4] Shu Xiaoling, Min Li. Application and nursing experience of the treatment of severe pneumonia in infants and young children [J]. Chinese Journal of Disability Medicine, 2014,08:32-33.

[5] Wang Kaiping, Fang Xing. Analysis of clinical treatment of severe pneumonia in infants and young children: a guide for Chinese medicine 2015,32:2+4. [J]. Nursing care of 56 infants with severe pneumonia [J]. Fujian medical journal, 2010,05:158-159.

[6] Wu Biyun, Shi Xiang Wen. Nursing care of 56 infants with severe pneumonia [J]. Fujian medical journal, 2010,05:158-159.