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Clinical Study and Analysis Of 700 Cases of Pneumonia in Children

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ABSTRACT

Pneumonia remains the first cause of the death of the children in China, Mycoplasma pneumoniae (MP) is a particularly common cause of older children and young people, The main pathogens of pneumonia in infants and children are viruses. The mortality rate has remained high. Pneumonia in infant's morbidity and mortality are far higher than those in young adults.The incidence of pneumonia in children is rapid, respiratory symptoms are obvious, and the condition of the disease is progressed rapidly, and other complications can occur. In this paper, 700 cases of pneumonia in Changan Hospital of Xi'an city were summarized, the children and clinical manifestations of the disease is associated with pneumonia diagnosis and treatment in recent years.

INTRODUCTION

Pneumonia is a common acute disease of the respiratory tract in childhood. Children's pneumonia also often caused by the mixed infection both of bacteria and viruses. The incidence of pneumonia in children is rapid, respiratory symptoms are obvious, and the condition of the disease is progressed rapidly, and other complications can occur. Infantile pneumonia is the main anti infection and treat the complications. With the widespread use of antibiotics and the changes in the body's responsiveness, low immune function in children and imperfect defense function of respiratory system, pediatric pneumonia has become one of the most common diseases in children. In this paper, 700 cases of pneumonia in Changan Hospital of Xi'an city were summarized. All seasons are easy to occur, especially in winter and spring. It is easy to recurrent attacks affect children's growth and development,if the treatment is not complete. The clinical data of the children are reported as follows.

BACKGROUND

General information and methods: From January 2016 to December 2016, 700 cases of children pneumonia in Changan hospital in Xi'an were investigated in 1 pairs of 1.Among the 700 children, 437 were boys and 263 were women; 252 cases aged <1 were took up 36%, 287 cases between the age of 1 and 2 were made up 41%, and 161 cases aged >2 were occupied 23%.

METHODS

Patients

We report the clinical features of 22 deceased patients with confirmed diagnoses of pneumonia, who presented to hospitals in the Changan Hospital xi'an of China between January 2016 to December 2016 ,Demographic, clinical and laboratory data from inpatient were collected.This study has been approved by the Ethics Committee related to the Hospital.

MATERIALS

(1) General characteristics: gender and age; (2) Clinical data: Hospitalization days, clinical performance, disease course; (3) Auxiliary examinations: laboratory examination or etiological examination clinical; (4) Prognosis.

Accessory Examination

In 700 cases of chest radiography, 23 cases of lobar pneumonia accounted for 3.28% of the total. 87 cases of double pulmonary bronchitis were 12.42%, 488 cases of bronchitis were 69.71%, 11 cases of interstitial pneumonia were 15.71%,and 4

cases of lobule in chest.198 cases of WBC > = 10 were 28.28%, 76 cases of neutrophils > = 70 were 10.86%,402 cases of lymphoid > = 40 were 57.43%, 267 cases of mononuclear > = 10 were 38.14%.196 cases of syncytial virus positive were took up 28%,4 cases of adenovirus positive were made up 0.57%,3 cases of influenza virus positive were occupied 0.43%.

Complication

2 cases of combined respiratory failure accounted for 0.28%, 13 cases of combined enteritis were 1.85%, 8 cases of combined myocardial injury were 1.14%, 1 case of combined heart failure were 0.14%, 1 case of combined Anemia were 0.14%,2 cases of combined laryngitis were 0.28%.

Treatment

368 cases of treatment with the second generation cephalosporins +antivirus were 52.57%, 183 cases of treatment with the thired generation cephalosporins+antivirus were 26.14%, 129 cases of treatment with Cephalosporin +Archie were 18.43%, 20 cases of Penicillin + antiviral were 2.85%, 23 cases of > 14 days of treatment were 3.28%, 72 cases of 7-10 days of treatment were 10.28%, 545 cases of 5-7 days of treatment were 77.86%, 60 cases of <5 days of treatment were 8.57%.

Result

Infantile pneumonia's main treatment is anti infection and treat the complications. At the time of anti infection, a wide range of antimicrobial spectrum, less drug resistant bacteria, and low toxicity of liver and kidney are used, combined use of two kinds of broad-spectrum antibiotics, Such as cephalosporins, macrolides, and antiviral drugs, and give oxygen therapy, nutritional support, Correcting the acid-base balance and electrolyte disturbance in some children, actively dealing with the complications and avoiding heart failure.

curative effect	Cephalosporin + antiviral	Cefotaxime + Archie	Penicillin + antivirus
cure	503people71.85%	102people14.57%	15 people2.14%
improve	35people5%	22people 3.14%	4people0.57%
Healed	13people1.86%	5people0.71%	1people0.14%

Note: Some of the healed children are automatically discharged from the hospital.

DISCUSS

According to the latest research reports, Pneumonia is still the first cause of the death of the children in our country, Serious threat to children's health, Because of its serious clinical manifestations, rapid progress, and a dangerous condition, the mortality rate has remained high. There is no definite diagnostic standard, and the diagnosis of etiology is very difficult. Through the analysis of the results of 700 cases of pneumonia, children's pneumonia is not only caused by some bacteria or viruses, but also often caused by the mixed infection of both. Some children have mycoplasma infection. Through the above analysis, we can draw a conclusion. The cure rate of Cephalosporin antiviral drugs is 90%, the cure rate of cephalosporin and Archie is over 90%, It is show that Children pneumonia is an infectious lung disease caused by a variety of pathogenic microbes and protozoa. Because of low immune function in children and imperfect defense function of respiratory system, pediatric pneumonia has become one of the most common diseases in children. Morbidity and mortality are far higher than those in young adults. The incidence of pneumonia in children is rapid, respiratory symptoms are obvious, and the condition of the disease is progressed rapidly, and other complications can occur. If the treatment is unseasonal, it can lead to serious consequences, The clinical manifestations of partial pneumonia in children are not typical, which results in the early diagnosis of pneumonia in children, and it is easy to develop into severe pneumonia.At present, children with pneumonia disease are more serious, there will be more factors to induce the emergence of pneumonia, seriously infringing the health of the children's lungs. This is some of the knowledge that we have to know. The clinical manifestations of respiratory symptoms is shortness of breath, cough, expectoration, mostly white phlegm, Other manifestations were fever, drooping spirit loss of appetite, abdominal pain, diarrhea, vomiting. The lungs can be heard dry and wet rales, individual can hear wheeze sounds. The raccessory examinationhe showed that the total number of white blood cells increased and the classification of neutrophils increased.The chest X-ray, or CT, showed that the double lung texture was thickened, and the increase was blurred, visible scattered in between, high density shadow, edge blurred. Part of the children were large, reticulate. The common pathogenic bacteria of bacterial pneumonia are Streptococcus pneumoniae, Staphylococcus aureus, Streptococcus, gram-negative tumors and so on. Bronchopneumonia caused by Streptococcus pneumoniae is the most common in infancy. The common virus of viral pneumonia is respiratory syncytial virus, adenovirus, influenza virus, parainfluenza virus, In addition, there are mycoplasma, chlamydia, fungi, protozoa, etc. Pathogens are mostly invaded by respiratory tract, causing bronchioles, alveoli and interstitial lung inflammation, causing small airway stenosis or even obstruction, resulting in ventilation disorders. Inflammation causes thickening of respiratory membranes and inflammatory exudates in alveolar cavity, resulting in ventilation disorder. Hypoxic and carbon dioxide retention, even respiratory failure

caused by ventilation and ventilation disorder, The reflex contraction of the pulmonary artery causes increased pulmonary arterial pressure, and the effect of pathogens and toxins can cause toxic myocarditis. The results of two factors together lead to psychological exhaustion, hypoxia and the role of pathogen toxin. It can also cause toxic encephalopathy, hemorrhage of digestive tract and toxic intestinal paralysis, as well as metabolic and respiratory acidosis, electrolyte disorders encephalopathy,disseminated intravascular coagulation may occur in severe cases.

CONCLUSION

In the developing countries,Lower respiratory tract infection is usually the main cause of death or next to diarrhoea, The most common cause of the disease is bacteria, of which Streptococcus pneumoniae is the most common, other pathogens including anaerobic bacteria, Staphylococcus aureus, Haemophilus influenzae, parrot fever, Chlamydia trachomatis, M. Mora and Legionella pneumophila, Klebsiella pneumonia and other gram negative bacillus coli. Mycoplasma pneumoniae (MP) is a particularly common cause of older children and young people, common in spring. The main pathogens of pneumonia in infants and children are viruses: respiratory syncytial virus, adenovirus, parainfluenza virus, type A and B influenza virus.. With the widespread use of antibiotics and the changes in the body's responsiveness, low immune function in children and imperfect defense function of respiratory system, pediatric pneumonia has become one of the most common diseases in children. Morbidity and mortality are far higher than those in young adults. The incidence of pneumonia in children is rapid, respiratory symptoms are obvious, and the condition of the disease is progressed rapidly, and other complications can occur. Infantile pneumonia is the main anti infection and treat the complications. At the time of anti infection, a wide range of antimicrobial spectrum, less drug resistant bacteria, and low toxicity of liver and kidney are used, combined use of two kinds of broad-spectrum antibiotics, Such as cephalosporins, macrolides, and antiviral drugs, and give oxygen therapy, nutritional support, Correcting the acid-base balance and electrolyte disturbance in some children, actively dealing with the complications [1-9].

REFERENCE

1. Nir A and Nasser N. (2005). Clinical value of NT-ProBNP and BNP in pediatric cardiology.J Card Fail. 11(suppl 5): S76-S80.
2. Koulouri S, Acherman RJ, Wong PC, Chan LS, et al. (2004). Utility of β type natriuretic peptide in differentiating congestive heart failure from lung disease in pediatric patienta with respriatory distress.Pediatr Cardiol. 25(4): 341-346.
3. Marcelo AP. (2000). Pathophysiology of pediatric heart failuer.Pediatric Cardiol. 11(3): 175-184.
4. ABDULA R. (2004). Drug therapy in pediatric cardiology and the role of digoxin in pediatric congeative heart failure.Pediatr Cardiol. 25(6): 621.
5. Barnes S, Shields B, Bonney W, Hardin J, et al. (2004). The pediatric cardiology phartnacopoeia ;2004 update.Pediatr Cardiol. 25(6): 623-646.
6. Godwin E, Yin Bun C, Syed Z, Alieu A, et al. (2007). Epidemiology and clinical features of pneunonia according to radiographic findings in Gambian children.Tropical Medicinc and International Health. 12(11): 1377-1385.
7. Walker CF, Black RE. (2004). Zinc and the risk for infectiones disease.Annu RevNutr. 24: 255-275.
8. Bhatnagar S and Natchu UC . (2004). Zinc in child health and disease.Indian J Pediatr. 71(11): 991-995.
9. BOOKER PD. (2002). Pharmacological support for children with myocardial dysfunction. Pediatr Anaesth. 12(1): 5-25.