



Case Report

Observation on the therapeutic effect of glucocorticoid in severe pneumonia

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Abstract: Objective: To observe the effect of glucocorticoid in severe pneumonia. **Methods:** 72 patients with severe pneumonia who were admitted to the ICU department of Ji'an city central people's hospital of Jiangxi province from January 2018 to January 2019 were treated by computer table method. Among them, 36 patients were included in the control group, and the rest 36 were included in the observation group. **Results:** The time cost of the observation group was less than that of the control group, $P < 0.05$. **Conclusion:** The combination of glucocorticoid in the treatment of severe pneumonia is more beneficial to the recovery of patients and reduces the time of suffering.

Keywords: Severe pneumonia; Conventional antibiotics; Glucocorticoids; Symptoms disappear

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Introduction

Among the common respiratory infections, pneumonia is typical, which can pose a threat to the patient's life in severe cases. Nowadays, although there are many types of antibiotics available clinically, the mortality rate of severe pneumonia has not decreased. Therefore, it is still the focus of clinical research to explore the combination treatment of drugs for severe pneumonia, improve the cure rate of patients and reduce their pain. In this study, 72 patients were observed. The combined glucocorticoid regimen was applied to 36 of them, results of which was compared with the effect of conventional antibiotic treatment group. The following report was sorted out.

Information and methods

Baseline information

The patients with severe pneumonia who entered the ICU department of Ji'an city central people's hospital in Jiangxi province from January 2018 to January 2019 were treated by computer table method. 72 patients were divided into two group. 36 patients were included in the control group (21 male, 15 female), and the mean age is 42.45 ± 3.09 years old ranging from 19 to 75 years old. The rest 36 cases were included in the observation group (24 male, 12 female), and the mean age is 42.63 ± 2.88 years old ranging from 18 to 77 years old. In the contrast, $P < 0.05$ was reflected.

Methods

The control group was treated with conventional antibiotics, that is, imipenem cilastatin sodium for injection (Chinese medicine j20130123). 0.9% normal saline or 0.5% glucose injection was selected before treatment, the proportion of which was 250-500 ml: 2-4 mg/ml, and the time of intravenous drip was controlled at about 60 minutes.

Observation group was treated combined with glucocorticoid, that is, the selection of methylprednisolone produced by pfizer italia company (Italy) (h20150245). Calculate the amount of each dose according to the standard of 2 mg/kg; before the choice of sodium chloride solution dilution, control the dosage at 250 ml; according to the patient's condition, carry out continuous intravenous drip treatment for 5-7 days.

Control group: imipenem cilastatin sodium 1.0 g q8h; observation group: imipenem cilastatin sodium 1.0 g q8h, methylprednisolone 2 mg/kg qd.

Observation indicators

Record the disappearance of symptoms such as fever and X line shadow.

Statistical methods

The data involved in the research was input into SPSS17.0 and measured by t test; the performance results were shown in the form of ($\pm s$); if $P \leq 0.05$, analysis can see statistical value.

Conclusion

As shown in *Table 1*, compared with the record of the time of symptom disappearance in each group, the values of the observation group showed smaller, $P < 0.05$.

Table 1. Disappearance of symptoms recorded by groups

Group	Fervescence	X line shadow	Cough
Control group (n=36)	5.49±1.57	12.61±2.69	11.74±3.28
Observation group (n=36)	3.62±1.28	8.05±2.01	8.96±2.91
<i>t</i>	5.5389	8.1477	3.8040
<i>P</i>	0.0000	0.0000	0.0003

Discussion

Generally speaking, the severity of pneumonia is determined by the degree of inflammatory response shown by the body, and severe pneumonia is usually accompanied by hypotension, shock and other symptoms. In the previous treatment, clinicians mainly take inhibitory treatment on inflammatory effect, cough and asthma, and improve lung function in patients with severe pneumonia. In this process, antibiotics such as imipenem and cilastatin sodium belong to the main drug of use^[1]. However, the long term clinical outcome is far from ideal. Glucocorticoids have a significant role in eliminating inflammatory factors and improving the resistance of the source of infection. When the drug enters the body, the temperature of the patient can be decreased while the range of drug action is expanded, the inflammatory response can be controlled in a short period of time, and the respiratory failure of the patient can be alleviated^[2]. From the mechanism of action, glucocorticoid belongs to molecular drugs, which can effectively regulate the development, metabolism and other functions of the body, improve the immunity of patients, resist the adverse effects of virus and infection. Methyl prednisolone is a common glucocorticoid. After clinical use, its efficacy in the patient's body lies in

anti-inflammatory, anti-shock, blocking the immune inflammatory response, with obvious efficacy for severe pneumonia and other allergic types of disease. However, because glucocorticoid has obvious hindrance to tissue recovery, healing and reverse effect on children's growth and development, it is necessary to make specific analysis according to the patient's condition when selecting glucocorticoid and determining the dosage so as to ensure the therapeutic effect^[3].

The results showed that the time indexes of disappearance of symptoms of the observation group (fever (3.62±1.28) days, X line shadow (8.05±2.01) days and cough (8.96) days) were lower than those of the control group.

To summarize the above, the application of glucocorticoid can promote the recovery of patients with severe pneumonia and reduce the pain caused by the disease.

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