Analysis of Traditional Chinese Medicine Treatment and Efficacy Evaluation Methods for New Pneumonia

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Abstract: Objective: To explore the traditional Chinese medicine treatment and efficacy evaluation method of new pneumonia. Methods: The correlation rule method was used to observe the efficacy of 240 cases of new pneumonia related symptoms and signs related to heat, depression and phlegm pathogenesis before and after treatment. Results: the comprehensive curative effect and multiple syndrome indicators of the experimental group were better than those of the control group, with statistically significant difference (P <0.01). Conclusion: The curative effect evaluation system of new pneumonia should include disease curative effect evaluation, syndrome curative effect evaluation, complication rate and concomitant medication rate evaluation, safety evaluation and health economics evaluation.

1. Introduction

The research on the evaluation method of the curative effect of traditional Chinese medicine is an urgent problem related to the better understanding and acceptance of traditional Chinese medicine by people inside and outside the industry and at home and abroad [1]. At present, new pneumonia is rampant all over the world. Patients can suffer respiratory failure or even death within a very short period of time after infection, which makes people afraid of the word virus. With the continuous changes of pathogen spectrum and the transformation of medical mode, the curative effect of traditional Chinese medicine comprehensive therapy on new pneumonia is gradually widely recognized. The new pneumonia corresponds to the “pneumonia asthma cough” of traditional Chinese medicine and belongs to the category of acute febrile diseases of traditional Chinese medicine [2]. Syndrome differentiation and treatment is the greatest feature and advantage of traditional Chinese medicine, and is the main means to grasp the main causes and pathogenesis of diseases in various stages. The clinical manifestations of viral pneumonia mainly include headache, fever, dry cough, systemic ache and lung infiltration. Viral pneumonia is not only related to the virulence of the virus and the route of infection, but also closely related to the patient's age and immune function [3]. Clinical treatment data show that traditional Chinese medicine is effective in treating this disease. Through clinical and experimental research on new pneumonia, it is hoped that a characteristic treatment method with traditional Chinese medicine can be explored.

2. Data and Methods

2.1 Data

The cases come from 240 clinical research cases studied by the evaluation method of medical treatment for viral pneumonia in a hospital. They are randomly divided into an experimental group and a control group, with 240 cases in the experimental group and 120 cases in the control group. The average age was (49.30 ±7.23) years old from 37 to 68 years old. Among 240 patients, there were 10 patients with influenza A and 9 patients with influenza B.

2.2 Method

Both groups of patients were given general treatment. The main contents of treatment were: dietary treatment with protein and vitamins. Patients were all bedridden to ensure sufficient rest

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time. According to the random allocation table and the blind method principle, the package will be provided to each participating research unit and the random allocation table will be provided at the same time. The development of new pneumonia syndromes has the characteristics of time limitation and dynamic evolution. On the basis of full access to relevant information, these information are then processed by different research methods. In the control group, ribavirin was injected intravenously and placebo was taken orally. Antibiotics and antiviral drugs were not allowed during observation. If the patient's body temperature exceeded 39 degrees, antipyretic was used. Clove, cassia seed, agastache rugosa, pepper and crude salt were mixed according to the weight ratio of 1: 1: 1: 0.5: 1.5, heated and stir-fried for 15 minutes. After the temperature was cooled, they were put into cloth bags for standby. The body temperature was 39.5℃ and above for 3 minutes. If the body temperature is between 38.5℃ and 39.5℃, calculate 2 points. The body temperature is 37.5℃ ~38.5℃ for 1 minute. The body temperature below 37.5℃ is counted as 0 points. In clinical trials, each participating research unit uses oral liquid and the injection that should be matched according to a random distribution table, and carries out single blind clinical research under the condition that researchers know and patients do not know.

2.3 Efficacy Observation Index

General physical examination items such as body temperature, heart rate, respiration and body weight; Symptoms include fever, cough, expectoration, wheezing, asthma, etc. Body temperature returned to normal, cough, phlegm accumulation, asthma and other clinical symptoms improved significantly. Pulmonary signs improved significantly. Remarkable effect: the curative effect index drops ≥ 75%-95%. Ineffective: Symptoms have not changed, pathological signs are still the same, and there is no improvement. The diagnosis of traditional Chinese medicine is based on the diagnostic criteria for asthma and cough of pneumonia in the diagnostic efficacy criteria for pediatric diseases of traditional Chinese medicine, while the diagnosis of western medicine is based on the diagnostic criteria for bronchopneumonia in practical pediatrics. APAAP bridging method is used to determine the viral antigen of nasopharyngeal secretions extracted.

2.4 Data Processing

SPSS 19.0 statistical software was applied to make statistical analysis of the data. Statistical analysis includes descriptive statistical analysis and inferential statistical analysis. Descriptive statistics of quantitative indicators such as age are described by statistical indicators such as average and standard deviation. All statistical tests were performed by bilateral tests, and the difference between $P \leq 0.05$ was statistically significant. Measurement data recorded in each group and pre-treatment values were compared and non-parametric tests were used.

3. Result

3.1 Distribution of Main Symptoms of Patients in Each Group

240 patients were tested, including 120 in the experimental group and 120 in the control group. There were significant differences in gender, tongue abnormalities and course distribution between the two groups. Among them, 2 people had gastrointestinal symptoms. One person engaged in pork trade, one had a history of slaughtering live chickens before the onset of the disease, and one had a history of traveling before the onset of the disease. Diet preference, mental mood, living habits under the influence of the day after tomorrow for a long time, make physical changes gradually. The latter should complete the basic constitution standard of each syndrome of western medicine diseases. Determination of constitution ratio of various syndromes of western medicine diseases; The basic constituent norms of the symptoms to which the disease belongs; As can be seen from Table 1, the gender comparison of patients in each group is $p = 0.237$ ($P > 0.05$), and the age comparison is ($P > 0.05$). Compared with the distribution of symptoms before treatment, the P values of fever, cough, phlegm obstruction, asthma and lung auscultation were all greater than 0.05, with no significant difference in statistics.

Table 1 Distribution of Main Symptoms Before Treatment in Two Groups of Patients

Group	Fever	Cough	Phlegm accumulation	Asthma	Pulmonary auscultation
Experimental group	23	31	25	23	36
Control group	22	28	20	21	34

3.2 Comparison Results of Comprehensive Curative Effects between the Two Groups

Among all the symptoms and signs, cough, shortness of breath, rough respiratory sound, wet rales, wheezing sound and dry rales of the lung are related to the pathogenesis of depression, which is the pathogenesis of lung qi stagnation and lung qi deficiency. The change of physical condition is not only manifested in a person's successive days, but also in the general characteristics of the population in a certain era, thus affecting their therapeutic thoughts on the whole. The comparison of the comprehensive curative effects of the two groups in accordance with the scheme set is shown in Table 2. The comprehensive curative effect, recovery rate and recovery rate of the experimental group are all better than those of the control group, with high statistical difference ($P<0.01$). The results of all analysis sets are the same.

Table 2 Comparison Results of Comprehensive Curative Effects between the Two

Group	Number of cases	Recovery	Take effect	Progress	Invalid	Increasing rate (%)
Experimental group	120	34	68	31	4	74.31
Control group	120	102	97	27	2	89.64

4. Discussion

Traditional Chinese medicine believes that viral pneumonia belongs to the category of asthma and cough, and phlegm-heat stagnation lung disease is common [4]. RSV pneumonia is the most common type of viral pneumonia, and is prone to chronic lung damage. In the correlation rule calculation of symptoms and signs before treatment of this sample, it was found that cough, lung respiratory sound roughness, lung respiratory sound roughness, lung wheezing sound, lung wet rales, cough, lung respiratory sound roughness, lung wheezing sound, lung wet rales occur frequently at the same time. The lung duo-sound digital diagnosis system, tongue diagnosis and chest radiography intelligent diagnosis system are used to objectively collect information of visible clinical symptoms and signs. International etiological investigation research on pneumonia shows that bacterial pneumonia is mostly in developing countries, while viral pneumonia is mostly in developed countries. Viral pneumonia is easy to cause chronic damage to the lungs. Through long-term clinical observation, traditional Chinese medicine has a better curative effect on new pneumonia. For example, traditional Chinese medicine has become the main method to treat diseases during SA expectation period. The role of traditional Chinese medicine in the field of anti-virus is increasingly recognized by everyone. Therefore, understanding diseases from the perspective of traditional Chinese medicine is particularly important for formulating standardized and effective treatment plans in the future.

To evaluate the feasibility and effectiveness of a treatment method is the first, including healing, marked effect, progress and ineffectiveness. In addition to effectiveness, evaluation of syndrome indicators is a more detailed evaluation method showing the advantages of traditional Chinese medicine treatment. Data show that all patients have fever symptoms, suggesting that the conflict between good and evil is caused by feeling external evil. However, other symptoms such as mental fatigue, fatigue, body ache, cough, rolling, dizziness and headache, body ache, fatigue and the like occur frequently. As clinical efficacy evaluation is a research topic involving theoretical level, thinking mode, methodology and other aspects, there are still many problems and difficulties to be solved and overcome in the current clinical efficacy evaluation of traditional Chinese medicine. In this article, the author tried to use association rules to observe the curative effect through the changes of the correlation between symptoms and signs related to heat, depression and phlegm pathogenesis before and after treatment, and found the frequent item set comparison of the correlation between symptoms and signs related to heat, depression and phlegm pathogenesis.

However, the evaluation of the index changes constituting the syndrome is a more refined evaluation method for whether the treatment plan, especially the traditional Chinese medicine treatment plan, has advantages. It is generally believed that western medicine is not effective in the treatment of viral pneumonia and has relatively large side effects. Therefore, when treating viral pneumonia clinically, most doctors like to adopt traditional Chinese medicine to treat viral pneumonia [5]. The application of traditional Chinese medicine decoction in the treatment of pneumonia asthma not only brings into play the characteristics of traditional Chinese medicine, but also reduces the treatment cost [6]. The application of internal and external combined treatment of traditional Chinese medicine in the treatment of new pneumonia can promote lung rales absorption and reduce hospitalization time [7].

Security is an indicator that is widely valued at present. It is generally believed that traditional Chinese medicine is safe. In order to ensure the objectivity and scientificalness of the systematic evaluation of TCM clinical efficacy, it is necessary to establish a set of scientific and authoritative operating specifications for the systematic evaluation system of TCM clinical efficacy. The results of the study show that at present, the treatment of viral pneumonia is mainly based on the combination of traditional Chinese medicine and western medicine (traditional Chinese medicine+antiviral western medicine+conventional treatment), and the treatment of traditional Chinese medicine or western medicine alone is less [8]. Traditional Chinese medicine mainly regulates the whole body of patients and treats them dialectically, which is different from symptomatic treatment of western medicine. If the symptom index is evaluated on the basis of effectiveness evaluation, the comprehensive evaluation of traditional Chinese medicine treatment effect can be more objective. The curative effect of oral administration of traditional Chinese medicine in the treatment of new pneumonia is affirmative, but children have the characteristic of difficulty in taking medicine. Vomiting is often caused after taking medicine, and the effective dosage cannot be guaranteed, which often affects the curative effect. At the same time of clinical research, the research data shall be entered into the database in double copies in time and locked. The data management center of the research group carries out data collection and analysis at the same time [9]. We believe that the standardization of syndrome differentiation has not been solved, the objectivity of curative effect evaluation cannot be realized, and the contents reflecting the characteristics of traditional Chinese medicine in curative effect evaluation indexes cannot be extracted. The so-called research on evaluation indexes and methods of TCM curative effect is impossible. Further multi-center and large-sample clinical trials to objectively evaluate the safety of different dosage forms and drugs of traditional Chinese medicine and to compare them with common western medicines for this disease are an important research task in the establishment of optimal treatment scheme for new pneumonia.

5. Conclusion

It should be pointed out that how to better and more scientifically evaluate the real curative effect of TCM in treating diseases and reflect the characteristics and advantages of TCM is a very difficult systematic project. At present, pediatrics and emergency department are the main departments for receiving patients with viral pneumonia. Most patients with viral pneumonia are mainly treated by oral diagnosis. However, due to the difficulty in extracting information from oral diagnosis medical records, hospitalized patients with easily available information are selected as the research objects. Previous methods focused on the evaluation of therapeutic effects on diseases, mainly based on the evaluation criteria of western medicine, while this method focused on the evaluation of therapeutic effects on syndromes, which is more in line with the laws and characteristics of syndrome differentiation and treatment in traditional Chinese medicine. Therefore, it is necessary to carry out safety evaluation, and also to carry out necessary evaluation on health economics. Traditional Chinese medicine is used to treat new pneumonia. There are multiple evaluation criteria when evaluating the curative effect. Not only the effectiveness but also the safety and economy should be comprehensively evaluated.

References

[1] He Meiya. (2015). Observation of clinical efficacy and safety evaluation of integrated traditional Chinese and western medicine in the treatment of severe pneumonia. Chinese Journal of Traditional Chinese Medicine, vol. 33, no. 7, pp. 1756-1758.

[2] Chen Laifu, Li Jun, Li Xueyong, et al. (2015). Evaluation of the therapeutic effect of promoting blood circulation, resolving phlegm, replenishing lung and replenishing qi on interstitial pneumonia. Modern Distance Education of Chinese Medicine in China, vol. 13 no. 4, pp. 49-50 .

[3] Wang Tianfeng. (2015). Analysis of clinical efficacy of TCM syndrome differentiation in treating children pneumonia. Inner Mongolian Medicine, vol. 29, no. 4, pp. 61-61.

[4] Wang Mingming, Han Xinmin. (2015). Thoughts on the evaluation of traditional Chinese medicine efficacy based on evidence-based medicine for children with metapneumovirus and boka virus pneumonia. China Journal of Basic Medicine in Traditional Chinese Medicine, no. 1, pp. 72-74.

[5] Zhang Hongmei, Yan Bo. (2016). Observation of curative effect of medicine-separated moxibustion on chest and back combined with ultrasonic atomization treatment and nursing care of children with pneumonia and wheezing. Chinese Medicine Herald, no. 11, pp. 108-110.

[6] Gao Yingli. (2017). Evaluation of the clinical efficacy and safety of meropenem in the treatment of stroke-associated pneumonia in the elderly. Everybody Health Journal, vol. 11, no. 1, pp. 160-161.

[7] Bai Chunxue, Yao Chen, Shang Hongcai, et al. (2019). Design idea and implementation process of randomized controlled clinical trial of Xuebijing injection in the treatment of severe community-acquired pneumonia. Chinese Critical Care Medicine, vol. 31, no. 7, pp. 811-814.

[8] Jiang Zhiyan, Xiao Zhen, Jiang Yonghong, et al. (2016). Evaluation of clinical efficacy of Qingfei Tongluo method in treating mycoplasma pneumonia in children. Journal of Shanghai University of Traditional Chinese Medicine, no. 5, pp. 17-21.

[9] Liang Xiuqun, Xu Mingrui, Lu Cuilin, et al. (2016). The clinical practice of clinical pharmacists participating in anti-infective treatment of patients with severe pneumonia. Evaluation and analysis of drug use in Chinese hospitals, vol. 16, no. 8, pp. 1137-1140.