Efecto del fármaco combinado con la terapia de intervención psicológica en el estado mental de pacientes con TB-MDR

Effect of Drug Combined with Psychological Intervention Therapy on Mental Status of MDR-TB Patients

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Abstracto
Debido al abuso de medicamentos antituberculosos y al diseño irracional de los esquemas de tratamiento farmacológico, se produce la recurrencia de la tuberculosis y la aparición de tuberculosis resistente a múltiples fármacos. Este artículo analizó el efecto del fármaco combinado con la intervención psicológica en el estado mental de los pacientes con MDR-TB. El grupo de tratamiento recibió tratamiento médico, al mismo tiempo, asesoramiento psicológico combinado y terapia de conversación; el grupo de control recibió un programa de tratamiento médico. Los médicos deben comprender la dinámica psicológica del paciente y escuchar sus inquietudes. Los medicamentos terapéuticos incluyen pirazinamida, levofloxacina, etambutol, capreomicina, etc. El cumplimiento, el puntaje de ansiedad / depresión y el puntaje de calidad de vida se compararon entre los dos grupos a los 6 y 12 meses. Resultados Después de 6 y 12 meses de tratamiento, las puntuaciones de ansiedad / depresión del grupo de tratamiento fueron significativamente mejores que las del grupo de control (P <0.05). Después de 12 meses de tratamiento, las puntuaciones de calidad de vida del grupo de tratamiento y el grupo de control fueron (72.8±9.24) y (62.5±7.8) respectivamente. El tratamiento de pacientes con TB-MDR con psicoterapia combinada con tratamiento médico puede mejorar significativamente la calidad de vida de los pacientes y reducir la ansiedad / depresión.

Palabras clave: etambutol; MDR-TB; Pirazinamida; Intervención psicológica

Abstract
Because of the abuse of anti-tuberculosis drugs and the irrational design of drug treatment schemes, the recurrence of tuberculosis and the emergence of multi-drug resistant tuberculosis are caused. This paper analyzed the effect of drug combined with psychological intervention on the mental status of patients with MDR-TB. The treatment group was given medical treatment, at the same time, combined psychological counseling and conversation therapy; the control group was given medical treatment program. Doctors need to understand the patient's psychological dynamics and listen to the patient's concerns. Therapeutic drugs include pyrazinamide, levofloxacina, ethambutol, capreomycin, etc. Compliance, anxiety/depression score and quality of life score were compared between the two groups at 6 and 12 months. Results After 6 and 12 months of treatment, the anxiety/depression scores of the treatment group were significantly better than those of the control group (P < 0.05). After 12 months of treatment, the quality of life scores of the treatment group and the control group were (72.8±9.24) and (62.5±7.8) respectively. The treatment of MDR-TB patients with psychotherapy combined with medical treatment can significantly improve the quality of life of patients and reduce anxiety/depression.

Key words: Ethambutol; MDR-TB; Pyrazinamide; Psychological intervention

1. Introduction

With the increase of population mobility, the incidence of tuberculosis in China shows an increasing trend. Although anti-tuberculosis treatment can achieve remarkable curative effect in clinic, the abuse of anti-tuberculosis drugs and the irrational design of drug treatment program lead to the recurrence of tuberculosis and the emergence of multi-drug resistant tuberculosis[1]. It is very difficult to cure tuberculosis thoroughly, resulting in the prolongation of the disease, which not only aggravates the adverse effects of patients. The occurrence of response greatly increases the cost of disease treatment and control, and produces pessimistic mood of patients, resulting in the interruption of treatment, seriously affecting the follow-up treatment, and increasing the long-term mortality of patients[2-3]. It is very important to improve patient's compliance and adjust patient's pessimism in the course of treatment. Research shows that effective psychological intervention
can play a significant guiding role for MDR-TB patients, deepen their understanding of MDR-TB, tolerate the occurrence of adverse reactions and improve their treatment compliance[4]. From September 2017 to September 2018, the authors observed the effects of drug therapy combined with psychological intervention on the mental disorders and quality of life of patients. The reports are as follows.

In recent years, because of the increasing population and mobility of people in the world, the incidence of tuberculosis is increasing year by year[5]. Tuberculosis has become an important disease of worldwide concern. There are relatively many factors leading to the occurrence of tuberculosis in patients, mainly because of the unreasonable use of anti-tuberculosis drugs, easy to lead to patients with multi-drug resistant tuberculosis. Multidrug-resistant pulmonary tuberculosis (MDR-TB) is a combination of isoniazid and rifampicin-related antituberculosis drugs[6-7]. It is difficult to treat MDR-TB in the course of treatment. The cure rate of patients is relatively low, which has a serious impact on the quality of life. Multidrug-resistant tuberculosis (MDR-TB) is difficult in the course of treatment. Many patients have poor treatment compliance, so the disease control rate of patients will also be affected.

2. Materials and Methods

2.1 Clinical data

84 patients with MDR-TB in our hospital were collected. Inclusion criteria: All patients first suffered from tuberculosis and relapsed after regular combined anti-tuberculosis treatment; sputum acid-fast staining and sputum culture were positive; drug sensitivity test showed that they were resistant to isoniazid and rifampicin. Exclusion criteria: repeated infection of tuberculosis; severe mental disorders in patients; negative sputum tuberculosis bacteria detection for three consecutive times; patients with severe pulmonary infection. The patients were randomly divided into control group and treatment group with 42 cases each. There were 27 males and 15 females in the treatment group, aged from 16 to 68 years, with an average age of (37.9 ±19.2) years. There were 29 males and 13 females in the control group, aged from 13 to 70 years, with an average age of (37.1 ±21.6) years. There was no significant difference in age and sex between the two groups (P > 0.05). Details are shown in Table 1.

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of cases</th>
<th>The ratio of men to women</th>
<th>Average age (age)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>42</td>
<td>29/13</td>
<td>37.1±21.6</td>
</tr>
<tr>
<td>therapy group</td>
<td>42</td>
<td>27/15</td>
<td>37.9±19.2</td>
</tr>
</tbody>
</table>

2.2 Treatment

All patients are members of the Global Fund's MDR-TB project, and the treatment program of the Global Fund's MDR-TB project is the main one. Multidrug-resistant 6Z Km (Am, Cm) Lfx (Mfx) Cs (PAS, E) Pto/18 ZLfx (Mfx) Cs (PAS, E) Pto. Among them, Z is pyrazinamide, Km is kanamycin, Am is amikacin, cm is capreomycin, Lfx is levofloxacain, Mfx is moxifloxacain, Cs is cycloserine, PAS is aminosalicylic acid, E is ethambutol, Pto is propionate isonicotinamide. At the same time, the treatment was divided into two stages, the first stage was injection period, which lasted for 6 months, and the duration of XDR was 12 months; the second stage was non-injection period, which lasted for 18 months, and the duration of XDR was 24 months. The treatment group was given both medical chemotherapy and psychological counseling.

The main treatment methods of psychological intervention are as follows: 1. Health education: health education methods when patients choose to adopt paths for education, need to formulate health path form for patients, establish health education nursing group of paths, and formulate effective nursing procedures according to the relevant standards of MDR-TB[8]. At the same time, it is necessary to integrate the actual needs of patients'health education and formulate the content of health education for patients from admission to the end. In the process of nursing, we should introduce the intervention work of the sick environment, understand the rules and regulations of my hospital and give a brief introduction to the medical staff. On the day of hospitalization, it is necessary to understand the patients'understanding of their own diseases, understand the patients' acceptance of health education knowledge, and formulate relevant health education programs. For 3 to 8 days after treatment, it is necessary to introduce the knowledge of MDR-TB to patients and their families. It mainly involves the content of drug use and the role of drugs[9-10]. It is also necessary to introduce some guidance work for patients so that patients can identify the clinical symptoms of patients'condition and introduce the purpose of various examinations for patients. And its significance lies in the prevention and treatment of patients'complications. After 9 to 11 days of treatment, the patients were introduced some common symptoms of adverse reactions, so that the patients could make clear the prevention and treatment measures of some adverse factors, and guide the patients to develop correct lifestyle and dietary habits. From the 12th day of hospitalization to the end of treatment, a comprehensive evaluation of patients'health knowledge is made, weak
links are strengthened, health guidance for patients is well done, patients should be reminded of periodic review, and patients should be informed in detail of what conditions they should be in time to visit my clinic. The implementation of health education should be done well, and the patients should be evaluated repeatedly by the competent nurses according to the route table, and the health education and evaluation should be done well[11]. The language education method and the graphic education method should be applied to guide the patients to ask questions randomly in the process, so as to strengthen the patients' grasp of health knowledge. (2) Psychological intervention: When psychological intervention is carried out, the inferiority of patients should be alleviated. According to the psychological characteristics of patients, patients should actively communicate with them, encourage them to speak out their own needs, and formulate nursing intervention measures to meet their reasonable needs, and formulate meticulous care and care for patients. Measures. To help patients eliminate their inner fear, so that patients can quickly integrate into the treatment environment from the beginning of treatment, medical staff need to create a good environment for patients to seek medical treatment, which can help patients improve treatment compliance[12-14]. In the process of psychological intervention, we also need to improve patients' confidence in the treatment of diseases, so that patients should be guided to transfer their emotions correctly, to pour out their inner thoughts, and to release their own pressure. To enable patients to actively face the disease, rationally do a good job of family and social support, so that patients actively participate in patient care, play a role of family support and supervision, and reduce the psychological burden of patients. The control group received chemotherapy only.

2.3 Observation Indicators
Anxiety/depression scores and quality of life scores were compared between the two groups for 6 and 12 months. Anxiety and depression scores were assessed by the Anxiety and Depression Score Scale (SAS), and Depression Score Scale (SDS). The comprehensive quality of life questionnaire-74 was used to evaluate the quality of life of patients. It was widely used in China and had good validity, including physical function, psychological function, social function and material life. Its scoring method was mainly 1-5 points per item, including positive score. They were assessed with 1-5 points, negative scores and 5-1 points.

2.4 Statistical Method
SPSS 13.0 software was used for statistical analysis. Measurement data were expressed as mean (+standard deviation). T test was used to compare the two groups. Counting data were expressed as percentage. Chi-square test was used to compare the rates, and P < 0.05 was the significant difference.

3. Results
3.1 Comparison of anxiety/depression scores between two groups
There was no significant difference in anxiety and depression scores between the two groups before treatment (P > 0.05). At 6 and 12 months after treatment, there were significant differences in anxiety and depression scores between the two groups (P < 0.05). See Table 2.

<table>
<thead>
<tr>
<th>Groups and time</th>
<th>Self-rating Depression Scale Score</th>
<th>Self-rating Anxiety Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>control group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before treatment</td>
<td>50.4 ± 7.2</td>
<td>58.4 ± 7.7</td>
</tr>
<tr>
<td>Treatment for 6 months</td>
<td>49.3 ± 4.8</td>
<td>56.7 ± 9.4</td>
</tr>
<tr>
<td>Treatment for 12 months</td>
<td>45.6 ± 5.7</td>
<td>52.3 ± 6.8</td>
</tr>
<tr>
<td>treatment group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before treatment</td>
<td>51.1 ± 6.7</td>
<td>60.1 ± 9.3</td>
</tr>
<tr>
<td>Treatment for 6 months</td>
<td>42.7 ± 3.5</td>
<td>45.1 ± 7.8</td>
</tr>
<tr>
<td>Treatment for 12 months</td>
<td>36.6 ± 4.8</td>
<td>41.8 ± 8.9</td>
</tr>
</tbody>
</table>

Compared with the control group at the same time, t = 6.045-7.875, * tP < 0.05

3.2 Comparison of quality of life between two groups
After 12 months of treatment, the quality of life score in the treatment group was significantly higher than that in the control group (P < 0.05), as shown in Table 3.

<table>
<thead>
<tr>
<th>Group</th>
<th>Psychological function</th>
<th>Somatic function</th>
<th>social function</th>
<th>material life</th>
<th>Total score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>70.4± 13.6</td>
<td>65.5 ± 11.9</td>
<td>64.3 ±13.2</td>
<td>60.4 ±10.9</td>
<td>63.6 ±9.4</td>
</tr>
</tbody>
</table>
In terms of psychological nursing, medical staff should do the following: 1. Before treatment, nurses need to strengthen communication and communication with patients, so that patients can improve their specific knowledge and understanding of MDR-TB. Accurate assessment of the patient's condition, personalized nursing program for patients, and related treatment programs, processes, effects and treatment process may occur in the adverse situation to inform patients, but also to inform patients of the relevant precautions, so that patients can actively cooperate. (2) Communication and communication: When communicating and communicating with patients, nurses need to ensure their own tone of voice is kind, stable, friendly, patient to communicate with patients, introduce the relevant cases, so as to ensure that patients have a good and stable attitude, introduce some successful cases for patients, and enhance patients. Confidence in treatment can help patients reduce
negative pressure and fear, and improve patients' compliance with treatment. (3) Communication skills: when communicating with patients, nurses need to observe the patients' language and expression as a basis to evaluate the patients' psychological and physiological conditions, and provide necessary psychological guidance for patients, and carry out relevant interventions for patients according to the patients' bad psychological conditions, so as to enable patients to be positive. Face the illness positively. (4) Active psychological nursing: patients have emotional instability, and many patients have poor sleep quality because of the influence of emotions and illness, which will make patients mental atrophy, easily lead to irritability, irritability and irritability. These bad psychological conditions will have an impact on the rehabilitation of patients, so we should actively provide psychological care for patients, so that patients can consciously reduce symptoms and improve the negative emotions of patients. (5) Health education: to explain disease knowledge to patients in detail, and make patients know the causes and treatment of the disease, so as to have a clear understanding of the impact on patients, improve patients' re-recognition and attention to the disease, and guide patients to improve treatment compliance, guide patients to develop a good life. Habits, to guide patients to actively exercise, in order to improve physical fitness, promote the rehabilitation of patients. Respect patients: pay attention to voice and mood in the process of communicating with patients, flexibly choose a variety of methods to transfer patients' attention to the disease, encourage patients to express their subjective feelings, and provide adequate respect and understanding to patients. Explain the influence of bad mood on the body and treatment for patients, encourage patients to contact with the outside world more, help patients build up confidence and determination to overcome the disease.

By comparing the quality of life between the two groups, the quality of life of the patients in the treatment group was significantly improved after psychological intervention. In the process of psychological intervention, families are required to give patients enough social and family support, so that patients can get social understanding and help, reduce the fluctuation of patients' spirit, cooperate with treatment with better mental state, and achieve better clinical results. In this study, no difference was found in the control of tuberculosis. This is mainly due to the consistency of basic drug use in the two groups, and the overall negative sputum tuberculosis situation is similar. This study also has some limitations, the number of cases is small, and the difference of tuberculosis control can not be observed due to the inefficiency of the test. After 12 months of treatment, there are still some patients whose condition has not improved, prolonging the treatment time for these patients may be effective, but the chemotherapeutic drugs are harmful to the body. Psychotherapy is effective in this study, but the differences in cultural level of patients are not considered in this study, and need to be supplemented by follow-up studies.

5. Conclusion

Multidrug-resistant pulmonary tuberculosis patients received psychological treatment at the same time of medical treatment, can significantly improve the quality of life of patients, reduce anxiety and depression of patients, it is worth promoting in clinical practice. It can be seen from the results that the combination of psychological nursing and multi-drug resistant pulmonary tuberculosis can effectively help patients improve treatment compliance, and it is of great significance to improve the patient's condition control, and it is a good nursing method. In conclusion, psychological nursing can effectively improve the treatment compliance of patients with MDR-TB, and it is of great value to control the patient's condition, which is worthy of promotion.

References