

Comparative analysis of the efficacy of different doses of oryzanol in the treatment of cardiovascular neurosis

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【Abstract】 **Objective** To compare and analyze the effects of different doses of oryzanol on cardiovascular neurosis. **Methods** A total of 90 patients with cardiovascular neurosis who were treated in a hospital from August 2016 to August 2017 were selected and divided into three groups according to the dose, with 30 patients in each group. That is, group A (high dose), group B (medium dose) and group C (low dose), the treatment effect of the three groups was compared. **Results** After treatment, the HAMA、HAMD score and the score of cardiovascular neurosis in A group were lower than those in B group and C group respectively ($P < 0.05$). **Conclusion** In the treatment of cardiovascular neurosis, high dose oryzanol can enhance the therapeutic effect, which is worthy of clinical application and popularization.

[Keywords] different doses; oryzanol; treatment of cardiovascular neurosis; comparative analysis

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Cardiovascular neurosis as one of the functional neurosis, and there is no evidence of organic heart disease in clinical practice. However, patients have conscious cardiovascular disease symptoms, mostly occurred in menopausal women^[1]. The main purpose of this study is to investigate the effect of different doses of oryzanol in the treatment of cardiovascular neurosis. 90 patients were selected as the subjects and randomly divided into three groups according to the different doses.

1 Information and methodology

1.1 General information

A total of 90 patients with cardiovascular neurosis admitted by a hospital from August 2016 to August 2017 were selected as the research objects, including 52 females and 38 males. According to the different dosage of oryzanol, the patients were randomly divided into three groups, with 30 cases in each group. The patients ranged in age from 23 to 52 years old, with an average age of (37.1±11.4) years. The clinical symptoms include dizziness, tinnitus, insomnia, dreaminess, loss of appetite and irritability, etc. After examination, there were increased heart sound, increased heart rate, slightly increased blood pressure, short systolic murmur and active leg reflex, etc. X-ray examination of the heart is normal; The electrocardiogram showed sinus arrhythmia and tachycardia. There was no significant difference in the general statistical data of the three groups ($P > 0.05$), so a comparative study between the three groups could be carried out.

1.2 Method

All patients were given 25 mg metoprolol, oral ,2 times a day.

A group (large dose) was given 100 mg of oryzanol, B group (medium dose)50 mg ,C group (small dose)25 mg, oral ,3 times a day^[2].

1.3 Observation indicators

Compared with the HAMA,HAMD score and cardiovascular neurosis score before and after treatment, the evaluation of disease degree was based on the total score of clinical symptoms, such as palpitation, shortness of breath, fatigue, insomnia, dreaminess, dizziness, etc.

1.4 Statistical methods

SPSS 22.0 statistical software was used to analyze the data. Measurement data was expressed as "x±s" and t test was used. Count data was expressed as percentage (%) and X² test was used. $P < 0.05$ was considered statistically significant.

2 Result

A group: before treatment, HAMD score (65.2±5.6), HAMA (15.27±3.39), cardiovascular neurosis score (58.4±5.3);

After treatment, H A M D score (42.1±5.1), H A M A (12.03±6.15) and cardiovascular neurosis score (31.24±3.3)

B group:before treatment, HAMD score (65.2±4.3), HAMA (17.2±5.0), cardiovascular neurosis score (53.1±6.1); After treatment, HAMD score (55.2±4.9), HAMA (14.2±3.9) and cardiovascular neurosis score (45.2±5.6).

C group: before treatment, HAMD score (65.1±5.3), HAMA (16.03±6.15), cardiovascular neurosis score (58.4±5.3);

After treatment, HAMD score (55.2±5.6), HAMA (15.2±5.6) and cardiovascular neurosis score (49.2±5.1).

Before treatment, there was no significant difference in HAMA, HAMD scores between the three groups ($P>0.05$); the above indexes in the A group after treatment were significantly lower than those in the other two groups ($P<0.05$), with statistically significant.

3 Discussion

At present, the etiological factor of cardiovascular neurosis has not been defined, and the study has found a great relationship with the patient's own personality, living environment and nerve type (anxiety, sadness and depression) and so on. When the external environment stimulates the patient, or when the patient is under great work pressure or tension, it is difficult to adapt to the situation at the moment, thus the possibility of inducing the disease is relatively high.^[3] Oryzanol, a combination of ferulic acid and phytosterol, is extracted from cereal oils, such as rice bran oil and germ oil. It has a significant effect in improving autonomic nerve dysfunction, endocrine balance disorder and mental nervous disorders, and is helpful to the emotional stability, the reduction of tension and anxiety, and is often used in the adjuvant treatment of pre-menstrual and menopausal syndrome; It has the effect of anti-arrhythmia and can reduce the excitability of myocardium by regulating the function of autonomic nerve. Improve sleep quality by promoting the improvement of blood supply to the heart muscle; In addition, it also has a series of physiological functions, such as anti-oxidation and anti-aging and so on^[4] In this study, HAMA, HAMD scores and cardiovascular neurological scores of patients in group A were significantly lower than those in the medium and low dose groups after treatment with high dose of oryzanol ($P < 0.05$). The differences between groups were significant ($P < 0.05$).

In conclusion, the treatment of cardiovascular neurosis with large dose of oryzanol can achieve significant therapeutic effect, and has high clinical application value, which is worthy of promotion.

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