

Clinical Observation of Compound Yizhihao Granules Combined with Chinese and Western Medicine in Treating Viral Myocarditis

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Abstract: The purpose of this article is to observe the clinical efficacy of Compound Yizhihao Granules combined with traditional Chinese and western medicine in the treatment of viral myocarditis (VMC), and to observe the changes in myocardial ultrastructure and morphological changes of apoptosis, providing a new study of viral myocarditis method. The experiment was divided into two groups. Based on the establishment of a VMC animal model inoculated with Coxsackievirus B3 (CVB3), the pathological changes and apoptosis of myocardial cells were observed with an optical microscope and an electron microscope. The control group was treated with compound Yizhihao granules combined with traditional Chinese and western medicine for viral myocarditis. The pathological changes and apoptosis of myocardial cells were observed with light microscope and electron microscope. The experimental results proved that myocardial lesions and inflammatory cell infiltration were visible under light or electron microscopy in the mice of the experimental group 5 days after the virus inoculation. The lesions reached a peak at 7-9 days, and the lesions basically recovered at 35 days. VMC mice showed apoptosis-like changes in myocardial cells, and apoptotic bodies were seen 7-9 days after virus inoculation. The control group found that the Artemisia angustifolia group had significant therapeutic effects in clinical symptoms, electrocardiogram, echocardiography, improvement of myocardial damage indicators, and negative conversion of Coxsackievirus B3 (CVB3) and enterovirus-RNA. The total effective rate was 88.2%. Compared with the taurine group, there was no significant difference ($p > 0.05$), compared with the control group ($p < 0.05$). Conclusion the mice in the experimental group can cause abnormal myocardial cell apoptosis in VMC and VMC after inoculation with CVB. The compound Yizhihao combined with astragalus and coenzyme and other traditional Chinese and western medicines have significant curative effects and is worthy of clinical popularization and application.

1. Introduction

VMC refers to myocardial inflammatory diseases with chest pain, heartache, and palpitations as the main clinical manifestations due to infection of related viruses with strong affinity to the myocardium (such as Coxsackie virus, influenza virus, enterovirus, etc.), which cause chest tightness, heartache, and palpitations. Studies have shown and confirmed that more and more types of viruses can invade the body alone or in combination with other viruses, causing focal or diffuse degeneration and necrosis of myocardial cells, infiltration of myocardial interstitial cells and cellulose exudation. Pathological changes such as myocardial inflammation cause myocardial injury, cardiac dysfunction and / or arrhythmia, or can be complicated by severe arrhythmias, heart failure, cardiogenic shock or sudden death, and even evolve into dilated myocardium Disease [1-2]. Modern medicine is still clear from the onset to diagnosis of VMC, but it lacks specificity in clinical treatment, so early treatment is essential, mainly antiviral drugs, antiarrhythmic drugs, antianginal drugs, and nutritional myocardial drugs. The goal of conventional treatment is to improve the symptoms of patients, prevent the occurrence of complications and prevent or delay the progress of the disease [3]. In recent years, the use of immunosuppressive agents for the treatment of VMC has been proposed, but it needs the support of clinical evidence-based medicine, so there are more controversies [4]. Therefore, at present, there is no new and specific treatment method for clinical application in western medicine.

The current researches on viral myocarditis are as follows: Brown, A.C and others have found that viral myocarditis is caused by viral infection of the heart. The main pathological changes are cardiomyocyte degeneration, necrosis, and interstitial inflammatory cell infiltration and fibrosis. A disease [5]. By establishing an animal model of acute viral myocarditis, the pathological changes of myocardial tissue during viral myocarditis, the expression of cytokines IL-6 and MMPs / TIMPs in myocardial tissue were studied, and the drug compound Yizhihao granule was used to intervene and observe its effect on VMC Mice survival status, myocardial pathological changes, virus titers, and their effects on the expression of IL-6 and MMPs / TIMPs provide a powerful theoretical basis for clinical treatment of VMC [6]. Jin, Q observed the pathological changes of myocardial cells and apoptosis of myocardial cells with electron microscope based on the successful establishment of VMC animal model [7]. LI, J objectively evaluated the clinical efficacy of Yixin Jiedu Granules in the treatment of viral myocarditis. Yixin Jiedu Granules in the treatment of viral myocarditis was superior to the control group in the efficacy of TCM syndromes, ECG and myocardial enzymes Qi deficiency is the basic pathogenesis of traditional Chinese medicine for the onset of viral myocarditis, and the main treatment should be "Yiqi Yangxin detoxification". Yixin Jiedu Granules have no clinical adverse reactions and can be applied in clinical practice [8-9]. Chen, W., Zhao, L. et al, by studying the clinical treatment effect and safety of traditional Chinese medicine combined with traditional western medicine in patients with severe viral myocarditis, it was found that patients with severe viral myocarditis use traditional Chinese medicine combined with conventional western medicine. The clinical effect is accurate and safe. High sex, no serious adverse reactions, can effectively improve the myocardial enzyme spectrum of patients, it is worth promoting [10].

As the incidence of VMC has been increasing year by year in recent years, and it is mostly adolescents, which seriously affects the people's health, this has attracted widespread attention from scholars in medical circles at home and abroad. Treatment (such as the lack of specific antiviral drugs), while traditional Chinese medicine treatment is based on syndrome differentiation, because syndrome differentiation is the prerequisite for traditional Chinese medicine to treat diseases, but in clinical practice, there are too many types of syndromes in traditional Chinese medicine. The

diagnostic criteria are not uniform. As for the syndrome differentiation in clinical reports and clinical applications, they are different, which is not conducive to the improvement of clinical efficacy, but also affects academic communication and progress [11]. Acute VMC myocardial injury is not only related to the virus-induced inflammatory response and autoimmune response, but also closely related to the abnormal changes of myocardial interstitial in the acute phase. Long-term recurrent acute VMC can easily lead to enlarged heart cavity, cardiac insufficiency and even dilated cardiomyopathy. Matrix metalloproteinases and their tissue inhibitors are the most important factors involved in the regulation of myocardial extracellular matrix. MMPs belongs to the family of zinc ion, calcium ion-dependent proteolytic enzymes, and is an important mediator of ECM degradation [12]. It is usually in dynamic equilibrium with endogenous TIMPs, which together regulate the synthesis and degradation of extracellular matrix, and participate in cell differentiation and adhesion, damage repair, and tissue remodeling. Under normal circumstances, myocardial interstitial collagen is in the process of continuous renewal, both collagen renewal and collagen degradation to maintain the stability of the extracellular matrix ECM. In pathological conditions, the expression and activity of MMPs is excessively enhanced or the MMPs / TIMPs ratio is deleted, which can lead to the excessive degradation of normal myocardial collagen, which is replaced by fibers lacking the connection structure, which remodels the heart tissue, causing the heart cavity to expand and the wall thinning leads to worsening cardiac function and myocardial fibrosis, which is involved in the pathogenesis of many cardiovascular diseases. Therefore, studying the expression of MMPs / TIMPs in the acute VMC myocardium group and regulating its expression at the same time has profound significance for elucidating the mechanism of VMC occurrence and development and clinical treatment.

In this article, the compound Yizhihao granule is used for the first time in the treatment of acute viral myocarditis. The experimental results show that the compound Yizhihao granules can effectively reduce the inflammatory response of the myocardium of VMC mice, moderately inhibit the cytokine's damage to the myocardium of VMC, reduce the expression of myocardial tissue, delay the occurrence of diseases, and provide a theory for the treatment of viral myocarditis Basis and practical guidance. At the same time, the myocardial cell apoptosis of experimental VMC was observed and observed with electron microscope. As a result, it was found that the apoptotic bodies of myocardial cells could be seen under the electron microscope 7 to 9 days after the VMC mice were inoculated with the virus. Concentration of chromatin, edge collection, and electron microscopy confirmed the existence of myocardial apoptosis.

2. Proposed Method

2.1 The Problem of Traditional Chinese and Western Medicine in Treating Viral Myocarditis

Viral myocarditis (VMC) is a myocardial inflammatory disease whose main clinical manifestations are chest tightness, heartache, and palpitations due to infection of related viruses with strong affinity to the heart muscle caused by western medicine. Traditional medicine does not have this name, but according to the clinical characteristics of the disease, Chinese medicine classifies it as palpitations, palpitations, chest palsy, and warm diseases in Chinese medicine. Western medicine does not have a specific treatment method for VMC in clinical practice. In general, comprehensive treatment programs are used: mainly to rest, reduce the burden on the heart and myocardial oxygen consumption, and use drugs such as creatinine and coenzyme to improve myocardial metabolic rate. Antiviral, antiarrhythmic and other symptomatic treatment. In recent

years, the traditional Chinese medicine treatment of VMC has the unique advantages of long-lasting therapeutic effects, which can significantly improve clinical symptoms and have small side effects.

Traditional Chinese medicine has accumulated a wealth of clinical experience in this disease. With the in-depth study of the etiology and pathogenesis of VMC by Chinese medicine practitioners and the summary of a large number of clinical cases, at the same time, with the continuous advancement of technology, traditional Chinese medicine and its extracts have also become the focus of research. The research overview of traditional Chinese medicine treatment of VMC is explained below.

(1) Dialectical classification and treatment

Clinically, the disease is differentiated into three basic types of syndromes, namely, the venom of virulent poisoning and the lungs, which disturb the heart; Doctors use their own Jiudu Huxin Decoction, which is often used in clinical practice; when patients are mainly lacking in heart and yin, the main use is Tianwang Buxindan, and when patients are mainly deficiency of qi and yin, they use Shengmai San together Licorice soup based addition and subtraction. In clinical treatment, the syndrome is divided into five syndrome types, one is the heat-toxin invasion type, and the symptomatic prescription uses Yinqiaosan and Qinggong decoction to achieve the effects of nourishing yin and reinvigorating the veins and detoxifying the heart; The poisoner's heart type, the main party mainly uses Xianglian pills and manna disinfectant to treat the effect of nourishing the heart and reinvigorate the pulse, clearing away heat and dampness; the third is the type of deficiency of qi and yin, and the treatment is mostly using Shengmai San to add and subtract. The effect of nourishing qi and nourishing yin and replenishing heart and replenishing pulses; the fourth is the heart-yang debilitating type, and the main is adding and subtracting Sini soup and Puguizhugan decoction to achieve the power of warming the heart-yang; the fifth is the yang-deficiency type. Shenfu Longmu Jiini Decoction takes Huiyang Gutu.

(2) Differentiation and staged treatment

Clinical doctors of traditional Chinese medicine divide the disease into several stages to treat it based on the Western medicine's cognition of VMC. According to western medicine, the disease is divided into two periods according to the disease condition, which is mainly defined according to the number of days of the disease course. First of all, it means that the course of disease is mostly within 14 days. At this time, he thinks that the patient's condition of qi deficiency is lighter, and he feels the evil spirit of the virus is heavier. Therefore, he advocates that Qingxin detoxification is the main treatment method at this time. The course of the disease reaches the middle and late stages. At this time, the qi and yin are seriously injured, and the qi and blood meridian are blocked due to chronic illness. Therefore, at this time, the rule of Yiqi Yangyin Tongluo should be used for treatment. Yinqiaosan and Huoxue Huayu Fang According to its own clinical observations, it is believed that the occurrence of the acute phase of the disease is mostly caused by the dampness and heat block of the middle coke. It should be treated from the stomach. The main treatment is Chaiwen Wendan Decoction. When the stomach is reduced, the dampness and heat are cleared, and during the recovery period, Shengmai San and Zhuye Gypsum Soup can be used to modify the body to play the role of nourishing qi, nourishing yin and strengthening the stomach. Agent and some other formulas for treatment.

2.2 Compound Yizhihao Granules for the treatment of viral Myocarditis

The composition of Compound Yizhihaozhi granule is Yizhihao, Daqingye and Isatis root. In addition to its antibacterial and antiviral effects (influenza virus, rhinovirus, adenovirus, herpes

virus and cytomegalovirus, etc.), *Artemisia angustifolia* contains flavonoids, ketoacid amino acids, glycosides, polysaccharides, Volatile oils, peptides and alkaloids, so it also has the role of expanding the coronary arteries, improving cardiac function, nourishing the heart muscle, reducing Ca^{2+} influx, anti-arrhythmia and improving immunity.

Some studies have suggested that Banlangen granules have a protective effect on myocardial cells of viral myocarditis, with a certain anti-Covx effect at a dose of 0.25 ~ 1.00mg / ml. In addition, some studies have shown that Daqingye also has antibacterial and antiviral effects. The author has confirmed in the etiology observation that there are multiple pathogens (including cytomegalovirus, herpes virus, rubella virus, toxoplasma, etc.) infection and their overlapping infections that are mainly Covx infection in patients with viral myocarditis in Xinjiang. In order to further explore the medicinal functions of *Artemisia annua* in Xinjiang, and give full play to the anti-inflammatory, antiviral, anti-allergic, immune and nutritional myocardial effects of Compound Yizhi *Artemisia* infusion, the author applied Compound Yizhi *Artemisia* infusion to replace taurine, combined with astragalus and coenzyme, etc. Other drug treatments were compared with Yang's treatment and pure western medicine treatment. The results show that the application of compound Yizhi has significant therapeutic effects in the improvement of clinical symptoms, improvement of myocardial damage, improvement, antiarrhythmia, and peripheral blood conversion to negative, etc. similar.

Compound Yizhihaozhi Granule is a clinical experience of pure Chinese medicine for treating colds in Uyghur medicine. It is included in the compilation of National Standards for Traditional Chinese Medicine. The prescription consists of three traditional Chinese medicines: Banlangen, Daqingye and Yizhihao. It is mainly used to treat sore throat. And colds and fevers [3]. According to literature reports, isatis roots play an anti-influenza virus effect through multiple chemical components and multiple targets. Isatidis agglutinin can block the expression of the nascent influenza virus and has a direct killing effect on the influenza virus. At the same time, nucleoside components such as uridine, guanosine, and adenosine can interfere with the synthesis of viral nucleic acids and play a direct anti-influenza virus effect. In addition, polysaccharides have immunomodulatory effects and play an indirect anti-influenza effect. Daqingye water extract can regulate immune function from two aspects of cellular immunity and humoral immunity, and play an indirect anti-influenza virus effect. Keto acids and flavonoids in *Artemisia sphaerocephala* can inhibit neuraminidase activity and membrane fusion, and exert a direct anti-influenza virus effect. Extracts from *Artemisia sphaerocephala* can enhance immune function and exert an indirect antiviral effect. In summary, studies have shown that the compound *Artemisia angustifolia* has the dual effects of inhibiting influenza virus replication and regulating body immunity, and it is speculated that it may play a role through multiple network pharmacological targets. However, no systematic studies have been reported on the specific components and network mechanisms of the compound *Artemisia angustifolia* that inhibit influenza virus replication and regulate body immunity.

Based on the existing drug target database and active compound database, this paper collects influenza virus related targets, target related active compounds and inactive compounds. Based on this, a series of anti-influenza drug target prediction models were established based on molecular fingerprints and molecular descriptors using Naive Bayes algorithm, and a multi-target prediction platform for anti-influenza was formed. At the same time, the chemical components of *Artemisia angustifolia* were collected. The target prediction platform was used to predict the effective components of the compound *Artemisia angustifolia* and its target targets, and the network was developed to develop professional software to construct a chemical composition-drug target

network and a drug target-biological pathway network to reveal the compound one The network pharmacological mechanism of *Artemisia annua* anti-influenza, which provides theoretical basis for the development and clinical application of compound *Artemisia angustifolia* against influenza.

3. Experiments

3.1 Experimental Data Set

The 60 cases were all inpatients in our hospital from May 2001 to April 2012. Of the 20 patients in the heart-yang deficiency group, 12 were male and 8 were female; aged 15 to 55 years, mean (30 ± 12.5) Years; the course of disease was 1 to 30 months, with an average of 6.5 months; of the 20 patients in the yin deficiency and fire-wang group, 11 were males and 9 were females; aged 14-58 years, mean (32 ± 11.36) years; duration 1-36 Months, with an average of 7.5 months; of the 20 patients in the western medicine group, 12 were males and 8 were females; aged 15 to 55 years, mean (33 ± 12.6) years; disease duration 1 to 28 months, average 6.8 months; between the three groups Gender, age, and course of disease were balanced and not significant (all $P > 0.05$).

3.2 Experimental Environment

The data was statistically processed using SPSS24.0 software, and the measurement data were expressed as mean \pm standard deviation ($x \pm s$). Comparisons between groups were performed using independent t-tests, and comparisons within groups were performed using paired t-tests. Count data were expressed by the number of cases and percentage (%), using chi-square test, $P < 0.05$ was considered statistically significant.

3.3 Experimental Steps

Treatment methods: 60 patients with viral myocarditis and ventricular arrhythmia were selected for observation. Among them, 24 hours before the enrollment, the dynamic electrocardiogram showed that ventricular premature beats were greater than 1500, and 20 cases were identified as heart-yang deficiency patients. Combined with slow heart rhythm therapy (Xinyang deficiency group), 20 patients were identified as Yin Deficiency and Huowang, and Tianwang Buxin Dan combined with slow heart rhythm therapy (Yin deficiency and Huowang group) was given, and the other 20 patients were treated only with slow heart rhythm (Western medicine) group). The dose of bradycardia in each group was adjusted to 100mg-150mg, q12h-q6h orally with the frequency of premature ventricular contractions, and each group took the medicine for 14 days. During the observation period, other antiarrhythmic drugs and vasodilator drugs were stopped.

Yizhihaozhi treatment group: Compound Yizhihaozhi granules (containing Yizhihaozhi, Daqingye, isatis root, etc.) 30g, 3 to 4 times a day; coenzyme 20g, daily & times; astragalus injection (40-60g) +% 5 Glucose injection 250ml, intravenous drip, daily 1. The course of treatment was 20 days, and later changed to astragalus essence oral solution, which was applied continuously for 3 to 6 months. Depending on the condition, anti-arrhythmic drugs such as mexiletine, Xinluping, etamidofurone, isobardine, and betaxolone can be added for a period of 1 to 6 months.

(1) Efficacy indicators: Observe changes in clinical TCM symptoms (chest tightness, palpitations, shortness of breath, fatigue, tongue, pulse) before and after onset, and changes in 24-hour dynamic electrocardiogram.

(2) Judgment criteria for curative effect: TCM symptoms (chest tightness, palpitations, shortness

of breath, fatigue, tongue sign, pulse sign) are scored with a semi-quantitative scoring method of 0-3 points, which are divided into significant, effective, ineffective and exacerbated. . Efficacy index = total points after treatment / total points before treatment \times 100%. Significant effect: curative effect index \leq 0.33; effective: $0.33 <$ curative effect index \leq 0.67; ineffective: $0.67 <$ curative effect index \leq 1; exacerbation: curative effect index $>$ 1. The 24-hour dynamic electrocardiogram curative effect evaluation standard is formulated with reference to relevant standards formulated by the Ministry of Health. Significant effect: Holter showed that premature ventricular contractions were reduced by $>$ 90% compared with before treatment, and effective: Holter showed that premature ventricular contractions were reduced by $>$ 50% compared with before treatment, and ineffective: Holter showed that premature ventricular contractions were reduced by $<$ 50% compared with before treatment. Aggravation: Holter showed more premature ventricular contractions than before treatment.

(3) Statistical method: t-test for measurement data, chi-square test for count data, and Ridit analysis for grade data.

4. Discussion

4.1 Comparison of Comprehensive Curative Effect between Treatment Group and Control Group

(1) The comparison of the overall efficacy between the two groups showed that the clinical cure was 25 cases in the treatment group, 23 cases were markedly effective, 9 cases were effective, and 3 cases were ineffective. In the control group, 18 cases were cured, 10 cases were markedly effective, 12 cases were effective, 20 cases were ineffective, and the total effective rate was 66.67%, as shown in Figure 1. The analysis of the data showed that the difference between the treatment group and the control group was statistically significant ($P < 0.05$), indicating that the treatment group was superior to the control group in terms of comprehensive efficacy. As shown in Table 1 and Figure 2.

Table 1: Comparison of comprehensive curative effect between treatment group and control group (example)

Group	Number of cases	Efficacy determination [n (%)]				Efficient(%)
		Clinical cure	Marked effect	Effective	Invalid	
Treatment group	60	25 (41.67)	23 (38.33)	9(15.00)	3 (5.00)	95.00
Control group	60	18 (30.00)	10 (16.67)	12(20.00)	20(33.33)	66.67

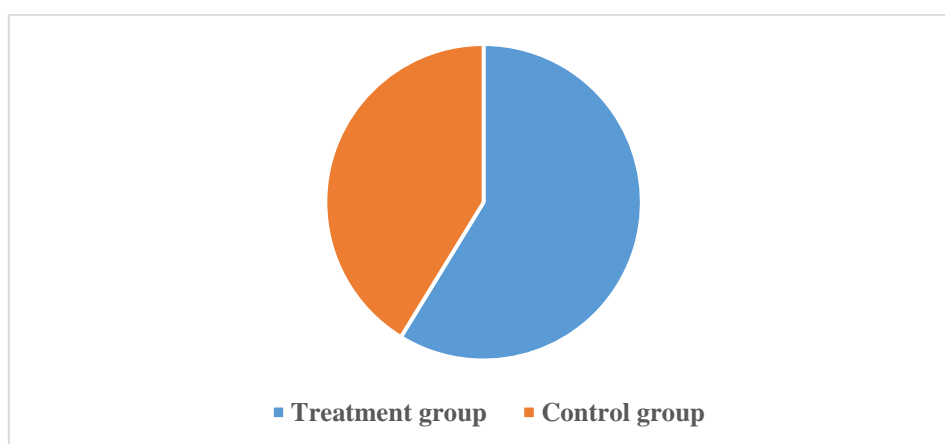


Figure 1: Difference in actual effect between treatment group and control group

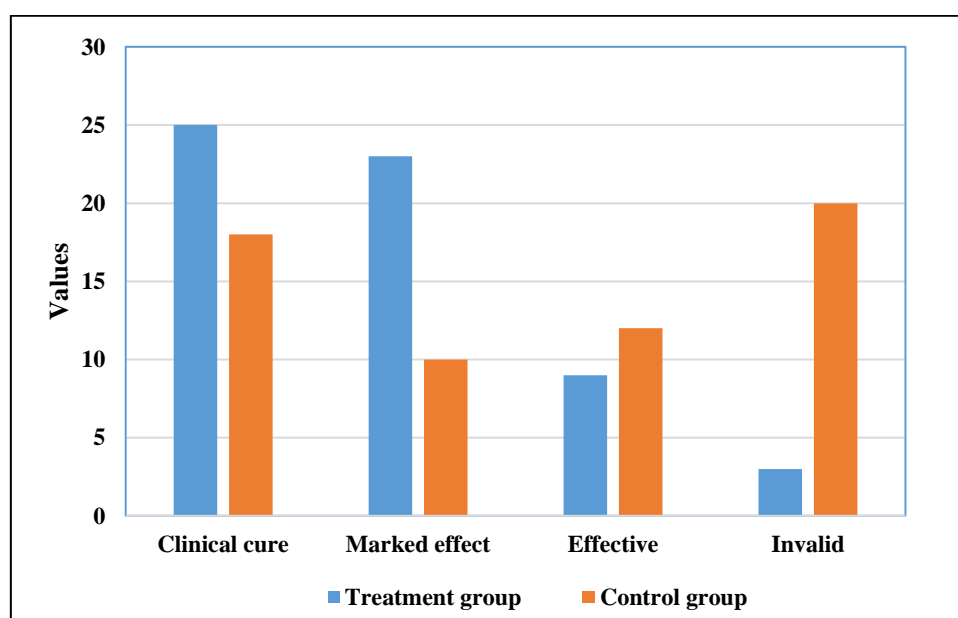


Figure 2: Comparison of comprehensive curative effect between treatment group and control group (example)

(2) A total of 60 cases were effective and effective in the *Artemisia annua* group, and 10 cases were ineffective, with a total effective rate of 83%; A total of 60 cases were effective and effective in the taurine group, and 8 were ineffective, with a total effective rate of 86.6%. There was no significant difference between the two groups ($p > 0.05$). There were 60 effective and significant patients in the control group and 24 ineffective ones. The total effective rate was 71.4%. There was a significant difference between the treatment group and the control group ($p < 0.01$). There is no significant difference in ECG changes between *Artemisia* spp. And taurine group as shown in Figure 3.

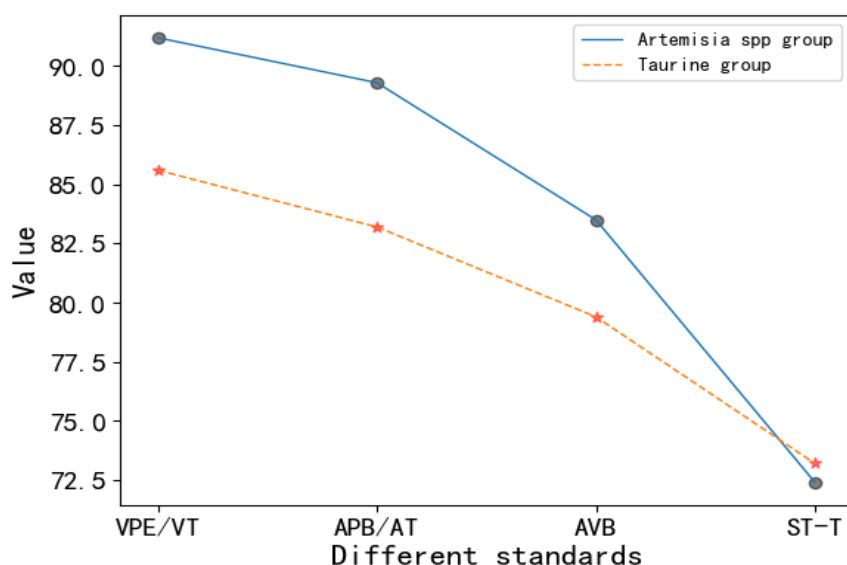


Figure 3: ECG changes in different treatments

4.2 Results and Comparison of Myocardial Changes in Experimental Mice

(1) General situation: The mice in the experimental group started to show symptoms on the 3rd day after the virus inoculation, which showed loose hair, poor mental performance, less movement, decreased appetite, and severe food refusal. Death began on day 4. After the fifth day, the symptoms gradually worsened, and the death gradually increased. Peak day 7-9. Symptoms gradually reduced after 15 days. At 35 days, the symptoms basically disappeared and the appetite gradually returned to normal. The mice in the control group had no symptoms. Macroscopic observation of the heart: The mice in the experimental group showed no significant change in the appearance of the heart on the 3rd day after inoculation with the virus; on the 5th day, white punctate lesions were visible under the epicardium of some mice; on the 7-15th day, many mice had the epicardium White dots, cords, or plaques can be seen below. Hearts in the control group showed no abnormalities, as shown in Table 2 and Figure 4.

Table 2: VMC cardiomyopathy

Groups	Numbers	I	N
d3	7	0	0
d5	8	0.8	0.6
d7	8	2.4	2.3
d9	8	2.6	2.4
d15	10	2.8	1.7

Note: Compared with the control group, $P < 0.01$; d3 indicates 3 days after the virus inoculation, d5 indicates 5 days after the virus inoculation, and d7, d9, d15, and d35 indicate 7 days, 9 days, 15 days, and 35 days after the virus injection. Due to mouse death and other reasons, the actual number of specimens obtained is significantly less than the number of selected animals

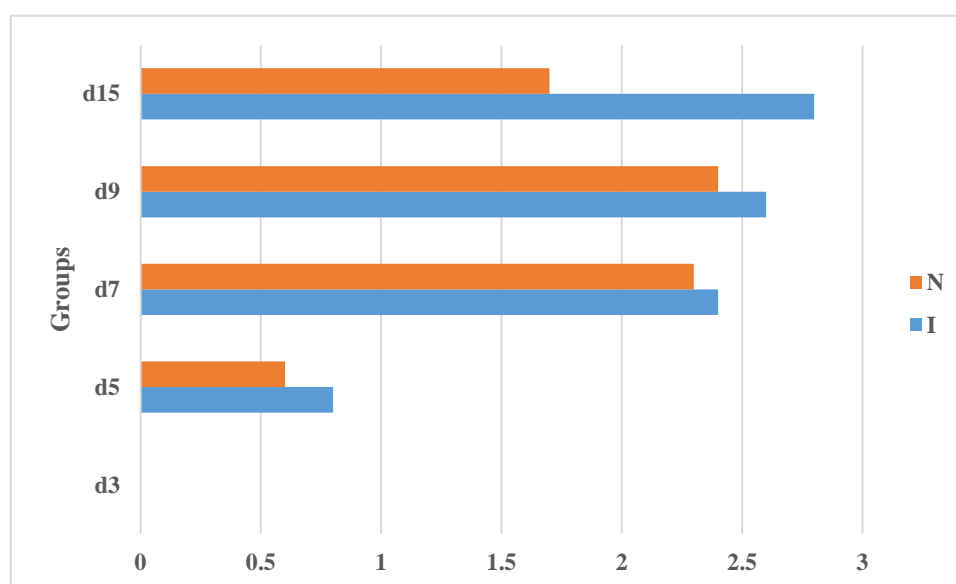


Figure 4: VMC cardiomyopathy in mice

(2) Electron microscopy observation of myocardial lesions: mice swelled with mitochondria, sarcolemma rupture, or even vacuole-like changes, sarcoplasmic reticulum expansion, myofibrillation, myofibrosis, and lymphocytes were seen at 7-9 days after virus inoculation. Wait for inflammatory cell infiltration (Figure 1). 5. Electron microscope observation of cardiomyocyte apoptosis: VMC mice showed apoptosis-like changes under electron microscope 7-9 days after virus inoculation: nuclear chromatin was concentrated and bordered; in addition, cardiomyocyte apoptotic bodies were also seen. Control group mice with concentrated cytoplasmic components showed no apoptotic changes as shown in Figure 5.



Figure 5: Electron microscope shows myocardial myofilament lysis, blurred z-line, and mitochondrial swelling in VMC mice

5. Conclusions

The VMC mice in the experimental group of this study began to show symptoms such as loose hair, less movement, and poor appetite 3 days after inoculation with the virus, and no significant changes in myocardial histopathological examination; symptoms were aggravated at 5 days and

focal myocardium was visible under light microscope Lysis and necrosis. Lymphocyte or monocyte infiltration: the peak of the lesions on 7-9 days, more myocardial necrosis lesions can be seen, even large areas of necrosis, and calcium salt deposition, large lymphocyte or monocyte infiltration; On the 15th day, symptoms began to gradually decrease, and inflammatory and necrotic lesions began to be absorbed. Fibrosis was seen to varying degrees; on the 35th day, the symptoms basically disappeared and the lesions basically recovered. Most of the fibrotic lesions were the main ones. In the experimental group of mice, mitochondrial swelling, sarcolemmal rupture, and even vacuole-like changes, sarcoplasmic reticulum expansion, myofibrillar disorganization, myofibrillar, and infiltration of inflammatory cells such as lymphocytes were seen 7 to 9 days after virus inoculation. The above-mentioned pathological process of the experimental group JJ and rat is consistent with the literature report.

In this clinical observation, the combination of traditional Chinese and western medicine is used to observe the anti-arrhythmia and the clinical symptoms of traditional Chinese medicine. Different clinical symptoms are used to treat the symptoms. Guizhi licorice dragon bone oyster soup combined with slow heart rhythm Treatment, for cases of syndrome of yin deficiency and fire and fire, Tianwang Buxin Dan plus and minus combined with slow heart rate treatment, and another with slow heart rate treatment. After 14 days of treatment, through statistical examination, it was found that the combination of traditional Chinese medicine syndrome differentiation and western medicine group improved clinical Concomitant symptoms were significantly better than the western medicine alone group ($P < 0.05$), and there was no significant difference between the two Chinese and western medicine combined groups ($P > 0.05$). For the treatment of anti-ventricular premature arrhythmia, Holter reported no significant difference between the three groups. ($P > 0.05$), suggesting that all three groups have the same antiarrhythmic effect. May be closely related to the pharmacological effects of slow heart rhythm.

The results of this clinical study prove that Yizhihao granules combined with Chinese and Western medicines have a significant effect on viral myocarditis, can significantly improve the symptoms and signs of patients, improve abnormal electrocardiogram performance, and effectively reduce abnormally elevated myocardial enzyme indexes. At the same time, it also supports the basic pathogenesis of "virulence invading the heart and heart-qi deficiency" viral myocarditis, and the method of "replenishing qi and nourishing the heart and detoxifying" is the basic method of traditional Chinese medicine for treating viral myocarditis. The results of this clinical observation show that the use of traditional Chinese medicine combined with antiarrhythmic drugs according to the syndrome differentiation not only can prevent arrhythmia, reduce the number of ventricular premature beats of viral myocarditis, but also improve the clinical symptoms of viral myocarditis and improve the quality of life of patients. Accelerate recovery. Compound Yizhihao granules combined with traditional Chinese and western medicine for viral myocarditis combined with ventricular arrhythmia is a superior treatment than western medicine alone, which is worthy of clinical promotion.

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