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# ASSESSMENT OF THE THERAPEUTIC EFFECTIVENESS OF NICORANDIL IN THE MANAGEMENT OF CORONARY HEART DISEASE

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Abstract: Coronary heart disease, as one of the common heart diseases, is also called coronary atherosclerotic heart disease. It is specifically characterized by myocardial ischemia or hypoxia caused by coronary atherosclerosis or dynamic vasospasm in patients. Myocardial necrosis and other conditions can cause patients to suffer from myocardial infarction, death, angina and other diseases. However, with the accelerated pace of people's life and unreasonable dietary structure, coronary heart disease appears in people of all ages, which can easily induce various cardiovascular and cerebrovascular complications and seriously threaten the life, health and safety of patients. This needs to be strengthened. Clinical trials of effective drugs for coronary heart disease to enhance the therapeutic effect of coronary heart disease.

Keywords: Nicorandil; Coronary heart disease; Clinical treatment progress; Evaluation

### 1 PROGRESS IN THE TREATMENT OF NICORANDIL IN STABLE ANGINA PECTORIS

In recent years, the incidence of coronary heart disease in our country has been increasing year by year. The reason is caused by the fast-paced life style and unreasonable dietary structure. In particular, diets high in fat and sugar content make the population at risk of coronary heart disease tend to become younger. Once the patient does not receive timely and effective clinical treatment, it will cause serious damage to the patient's life and health. It is imperative to strengthen the clinical drug treatment of patients. As an effective drug for various types of angina pectoris, nicorandil is a nitrate compound that can effectively reduce the risk of cardiovascular events [1-2]. Since its first launch in 1984, nicorandil has been widely used in the clinical treatment of stable angina pectoris and accumulated a large amount of clinical research data. At the same time, nicorandil is also a stable agent in the treatment of angina pectoris. Through experiments on Hospitalized patients with stable angina pectoris were tested for vascular classification and coronary prognosis risk factors such as non-fatal myocardial infarction to rule out the interference of patients with factors such as respiratory diseases and bad habits such as smoking. Finally, it was found that the difference between the test results between the two groups of patients was not significant and not statistically significant[3]. Later, a clinical trial was conducted on the oral treatment of nicorandil and the treatment of stable angina with isosorbide mononitrate. The final results proved that nicorandil can effectively reduce the incidence of angina in patients and the dosage of nitroglycerin, and its therapeutic effect is better than Far superior to isosorbide mononitrate, it can be said that nicorandil has become one of the main ways to treat angina pectoris[4-5].

### 2 PROGRESS IN THE TREATMENT OF NICORANDIL IN UNSTABLE ANGINA PECTORIS

According to relevant clinical treatment experiments and reference literature, the random number method was used to group the experimental subjects into an experimental group using nicorandil to treat unstable angina and a control group using isosorbide dinitrate injection, a controlled experiment was carried out with the consent of the patients[6]. The results showed that the probability of angina pectoris disappearing in the experimental group of patients who used nicorandil to treat angina pectoris was 76%, which was much higher than that of the patients in the control group who used isosorbide dinitrate injection to treat angina pectoris[7]. The probability of seizure disappearance was 53.6%, and the difference between the two groups' data was statistically significant; while the probability of adverse reactions in the experimental group treated with nicorandil after treatment was 2.4%, which was much lower than that of the group treated with nicorandil 7.6% of patients in the sorbitol ester injection group.

# 3 PROGRESS IN THE TREATMENT OF NICORANDIL IN ACUTE ST-SEGMENT ELEVATION MYOCARDIAL INFARCTION

This study used a random grouping method to divide 366 experimental subjects with acute ST-segment elevation myocardial infarction into four groups: patients with prodromal symptoms who needed to be treated with nicorandil, patients with no prodromal symptoms, and patients who were treated with placebo. Patients with prodromal symptoms and patients without prodromal symptoms were treated with intravenous medication before performing coronary intervention. The final results showed that the degree of prevention of coronary microvascular damage in patients with prodromal angina and treated with nicorandil during surgery was very close to that of patients without prodromal angina, and the incidence of postoperative cardiovascular disease was the probability is extremely low and is higher in patients treated with placebo. Among them, 84.5% of nicorandil patients had grade 3 blood flow after thrombolysis for

myocardial infarction after surgery, and 81.9% of placebo patients. The patients with ST segment decrease greater than 50% accounted for 78.6% of the nicorandil group and 81.9% of the placebo group. 65.3%, indicating that intravenous injection of nicorandil has a positive protective effect on patients before percutaneous coronary intervention and can effectively improve the myocardial infarction status of patients.

# 4 PROGRESS OF NICORANDIL IN MYOCARDIAL PROTECTION DURING PERCUTANEOUS CORONARY INTERVENTION

Through the extensive practice of nicorandil in percutaneous coronary intervention, it has been proved that nicorandil has an important protective effect on the myocardium during and after percutaneous coronary intervention. It is shown in relevant literature, in order to verify the protective effect of nicorandil on the myocardium of patients during percutaneous coronary intervention surgery, 50 surgical patients were randomly divided into control group and nicorandil group. Among them, patients in the nicorandil group The patient maintained intravenous injection of nicorandil 24 hours before the operation, and then took nicorandil orally. At the same time, the patient's myosin, creatine kinase, and troponin levels were tested before and after the operation. Tests were conducted every 4 hours to check the patient's health status. The final results proved that nicorandil can effectively protect the patient's myocardial condition during percutaneous coronary intervention.

### **5 CONCLUSION**

In summary, nicorandil, as an application of nitrate fat, has effectively improved the recovery rate of patients with coronary heart disease in clinical treatment experiments of coronary heart disease, especially in patients with stable angina, unstable angina, and acute ST. Myocardial protection plays an important protective role in segment elevation myocardial infarction and percutaneous coronary intervention, and has broad application prospects in the treatment of coronary heart disease.

#### **COMPETING INTERESTS**

The authors have no relevant financial or non-financial interests to disclose.

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