

Effect of Exercise Training on Rehabilitation of Patients with Stable Coronary Heart Disease

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Abstract: This article mainly adopts the form of review, from the risk factors of coronary heart disease, the treatment method of coronary heart disease, the treatment method of exercise training therapy (drug and exercise combination), the advantages and the comparison of traditional treatment methods, around these points to discuss and study the optimal influence of rehabilitation process of patients with stable stage coronary heart disease in sports training team.

1. Key Factors in Coronary Heart Disease

Coronary heart disease refers to the heart disease caused by coronary atherosclerosis or spasms caused by myocardial ischemia and hypoxia, which is usually called angina and myocardial infarction in clinic. At present, the fatality rate of coronary heart disease is on the rise. Therefore, it is necessary to strengthen the prevention and rehabilitation of coronary heart disease. Numerous clinical and experimental studies have demonstrated this. Exercise training and the occurrence of cardiovascular diseases have a great relationship, regular exercise can be effective prevention and treatment of cardiovascular diseases. Especially in the coronary heart disease incidence and mortality has a reduced effect [1]. At present, the World Health Organization has listed the lack of exercise as the most critical cause of cardiovascular disease. Therefore, now many coronary heart disease treatment rehabilitation has taken exercise as one of the most important methods. Drinking and smoking, bad living routine, bad living habits, high blood pressure, high blood sugar, hyperlipidemia, diabetes, kidney disease, mental stress, heredity and other important factors of coronary heart disease can accelerate the development of the disease.

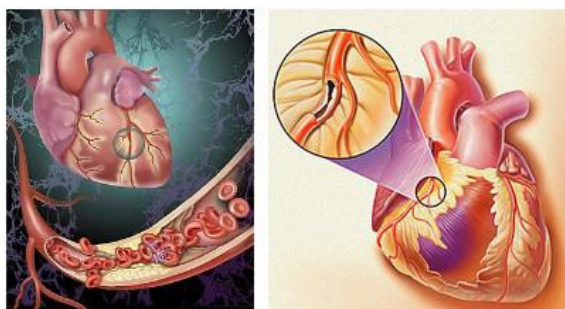


Figure 1 Coronary heart disease

2. Treatment of Coronary Heart Disease Drug Treatment

Paramedics should treat patients with drugs such as nitrates, calcium antagonists, and beta-adrenergic blockers, according to their doctor's instructions. To guide patients to take drugs correctly, do not arbitrarily increase or decrease the dosage of drugs or do not take drugs. According to the actual situation of the patients, the medical staff should set a specific time for the patients to check the ECG [2]. Observe for adverse drug reactions after taking the medication and inform the

attending physician of the patient's condition.

2.1. Diet Therapy

The patient diet should be light-based, determined not to eat high-calorie, high-fat, high-sugar food. Patients should eat foods rich in cellulose and trace elements. Fresh fruits and vegetables, fish, mushrooms, soy products and other foods. as far as possible choose unsaturated fatty acid rich vegetable oil instead of animal oil. Patients are also forbidden to eat animal guts because they contain too much cholesterol. Patients can not eat more than half of their daily carbohydrate intake. In addition, patients must not eat pickled, barbecued, chemically processed food, prohibit smoking and drinking, overeating, and establish a balanced nutrition meal, in the selection of nutritious meals should be based on the ability to meet the daily energy needs of patients, but also to learn more about the dietary preferences of patients, such as what taste of food patients like, which food allergies [3]. Choose foods that are low in calories while trying to satisfy a patient's preferences.

2.2. Exercise Therapy

Add exercise therapy to routine drug therapy and diet therapy for scientific and effective rehabilitation exercise. According to the current study, exercise therapy can promote the rehabilitation of patients with coronary heart disease more quickly. Exercise treatments are also varied, such as: playing tai chi, playing badminton, jogging, walking, swimming and other aerobic exercise, if the patient's condition is more serious, can be guided by the doctor's advice to carry out suitable exercise for patients.



Figure 2 Coronary heart disease

3. Effect of Exercise on Coronary Heart Disease

Proper aerobic exercise can improve the heart's working ability and improve blood circulation, thus affecting the heart's motor function. worsening development of coronary heart disease, thus accelerating the recovery time of patients with coronary heart disease. Proper physical exercise can also block the risk factors of coronary heart disease, such as: controlling the development of hypertension, reducing blood lipids, adjusting blood pressure, lowering blood pressure, lowering blood pressure, etc. dyslipidemia, improve the regulation of nervous system function, but may also have a direct effect on the heart, coronary artery. The study found that 60 percent of the highest heart rate in aerobic exercise increased the ability to scavenge free radicals and reduced the level of free radicals in endothelial tissue [4]. Exercise can effectively prevent coronary heart disease. make the patient after exercise blood pressure, heart rate, weight loss, angina disappeared or wasting patients decreased, st segment decreased, blood lipid improvement, exercise time and exercise volume can be extended, anaerobic threshold significantly increased, mortality significantly decreased.

3.1. Effects of Exercise on Heart Function

According to effective scientific research, aerobic exercise training has the effect of increasing coronary blood flow, reducing platelet aggregation, maintaining vascular recanalization, preventing restenosis, promoting vascular recanalization and promoting vascular recanalization. In these ways, the patient's heart function has been improved. Exercise not only lowers blood pressure, but also reduces symptoms of left ventricular hypertrophy and improves relaxation, especially in patients with mild systolic heart failure, according to research [5]. The number of left ventricular ejections

significantly increased. Most researchers believe that long-term aerobic exercise can reduce the water content of high altitude blood catecholamine, reduce the tension of peripheral blood vessels, reduce the contraction rate of peripheral blood vessels, and reduce the contraction rate of peripheral blood vessels. thereby reducing the load of the heart and thus improving cardiac function. The study reported that aerobic exercise not only has the above functions, but also can improve the dissolution and oxidation of fatty acids and lactic acid, improve the utilization of myocardial oxygen, promote the storage of myocardial glycogen, and reduce the accumulation of fat.

3.2. Effect of Exercise on Collateral Circulation of the Heart

According to the study, the central effects of exercise training are mainly manifested in the formation of collateral circulation of the heart, the increase of coronary blood flow, the increase of coronary blood flow, and the increase of coronary blood flow. Exercise training can increase the supply capacity of oxygen, accelerate the establishment of coronary collateral circulation, and reverse the development of coronary heart disease to improve the quality of life of patients. For PTCA patients such as early recovery exercise, the study found [6], including extracorporeal counterpulsation, but in myocardial oxygen, accelerates the formation of coronary collateral circulation, improving or eliminating clinical symptoms. The reason may be due to the association between increased myocardial ischemia-reperfusion and cardiac reserve capacity due to the primary stenotic collateral circulation of blood vessels.

3.3. Effects of Exercise on Blood Pressure and Blood Lipid in Patients with Coronary Heart Disease

Effects on blood pressure: aerobic exercise is proposed by kenneth, a leading fitness expert in the united states. In 1989, WHO and the International Institute of Hypertension first recommended aerobic exercise. is a non-pharmacological hypotensive method. Zhang Xiaofang's study found that exercise therapy could prevent and treat damage to vital organs such as the heart, brain and kidney caused by coronary arteries. Heart disease and high blood pressure. Aerobic exercise can make the capillaries in muscle exercise open in large quantities, thus reducing the resistance of the surrounding blood and making the blood less. Certainly, improve cardiac natriuretic peptide secretion, cardiac natriuretic agent, sodium excretion effect, thereby further lowering blood pressure. Systolic blood pressure should pay special attention to the change of blood pressure during exercise, because studies have shown that the main change of blood pressure during aerobic exercise is systolic blood pressure, if the systolic blood pressure does not rise, but is falling, indicating that the patient has heart disease and other problems.



Figure 3 Sports

4. Comparison of Traditional Treatment and Exercise in Coronary Heart Disease

The traditional treatment of coronary heart disease is pure drug treatment, patients are not recommended to use this treatment, patients should use exercise treatment, because drug treatment is passive-oriented treatment, and exercise is active-based treatment. And the drug treatment is not

conducive to fully mobilize the patient's enthusiasm for treatment. Exercise boosts hormonal activity, boosts mood and helps people recover more quickly. And the most important thing is that exercise can save a lot of money for a patient with a tight economic condition compared to traditional treatments, allowing the patient to have a healthy recovery environment without spending too much money.

5. Conclusion

Regular exercise training for patients with coronary heart disease can improve their body function from all aspects, the most important of which is to improve the blood vessel function, help patients increase to the maximum oxygen content and increase the oxidation rate, so that patients have antioxidant activity in the body. These changes in the internal structure of the body are conducive to a certain recovery of cardiac diastolic function, allowing the patient to remain between a relatively stable heart rate and blood pressure value, and can also increase the muscle quality of the patient and improve the muscle cognitive ability of the patient. Let the effective exercise help the patient increase the tension of parasympathetic nerve steady increase, so as to increase the patient's heart rate variability, increase the patient's ventricular ectopic activity threshold, so that the patient can fundamentally get effective improvement and prognosis. On the other hand, exercise can also induce oxidative stress in patients and ultimately help them reduce complications and morbidity of coronary heart disease. Many scientific studies around the world have proved that people are aware of the necessity of exercising in the treatment of coronary heart disease, which requires patients to take the initiative to exercise, make scientific and effective exercise plan, actively adjust their daily rest and eating habits, reduce their mental stress, regulate their own bad mood, and so on.

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