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Analysis of Rehabilitation and Nursing Measures for Patients after Percutaneous Coronary Intervention

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Abstract: Coronary intervention is an important method for the treatment of coronary heart disease, which can improve the myocardial blood supply function of patients to a great extent. The nursing and rehabilitation after coronary intervention are very important for patients. In view of this, this article analyzed the rehabilitation and nursing of patients after coronary intervention, and put forward some strategies, only for the reference of colleagues.

Keywords: Percutaneous coronary intervention; Rehabilitation; Nursing care; Measures

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1. Introduction

In recent years, with the increasing incidence of cardiovascular disease, coronary intervention surgery has become a key technique to restore myocardial perfusion. However, the success of the operation does not mean that the patient has been cured. After the operation, although the patient's blood vessels are no longer narrow and the risk of thrombosis is significantly reduced, there are still some problems that need to be solved urgently. Studies have shown that scientific rehabilitation and nursing measures can greatly reduce the probability of complications after surgery, so that the heart function of patients can be further improved, and the survival period of patients can be greatly prolonged. Therefore, one should try to build a more perfect and scientific postoperative rehabilitation and nursing system, so as to achieve further optimization and innovation in the treatment of coronary heart disease.

2. Early postoperative nursing to prevent risks and lay a good foundation

Generally, the early postoperative period is usually the most unstable period of the patient's condition. At this time, one should do a good job in the key nursing work, observe the patient's condition changes at all times, and do a good job in the prevention of possible acute complications, so as to create a favorable condition for the recovery of patients [1]. When carrying out nursing work, one should combine different surgical methods and

choose the appropriate nursing mode. In addition, one also need to combine the basic situation of patients and the recovery of surgery, targeted adjustment. The puncture site is an area with a high incidence of complications after surgery. Therefore, when carrying out nursing work, one should pay attention to the hemostasis and blood supply protection of the puncture site.

For patients with femoral artery puncture, it is necessary to keep the puncture side limb immobile after surgery to avoid excessive activity and prevent the displacement of the patient's compression device. One also need to carefully observe whether there is bleeding and skin color change at the puncture site. For patients with radial artery puncture, one should pay attention to the wrist part to avoid hematoma or bleeding at the puncture site [2]. The nursing staff should give reasonable guidance to the family members of the patients, so that they can recognize some abnormal conditions in time. For example, if the patient's limbs are swollen, the skin is white or cyanotic, they should communicate with the medical staff in time, which can greatly improve the work effect of nursing. In addition, one should ensure that the puncture site is clean and dry, and avoid the patient's puncture site from being stained with water to prevent infection.

In the early stage after surgery, one also need to effectively monitor the patient's heart rate, blood pressure and blood oxygen saturation, and pay close attention to the patient's subjective symptoms. If the patient has tachycardia or abnormal heart rate, it may be related to the influence of drugs. If the patient has insufficient blood volume and increased myocardial oxygen consumption, one should do timely intervention [3]. In addition, nursing staff should pay attention to whether the patient has shortness of breath, chest tightness, sweating and other conditions, which may indicate myocardial ischemia. At this time, it is necessary to conduct electrocardiogram and other examinations for the patient to achieve risk screening.

After the operation, one should follow the principle of step by step, patients should avoid premature or strenuous exercise, within 12 hours after the operation, patients should rest in bed, can adjust their position properly, avoid sudden start and turn over to prevent orthostatic hypotension [4]. After patients in stable condition, nurses can guide the patients to carry out the bed activities gradually, such as sitting and standing. In the activity, need to have a special person to accompany, if the patient dizziness, to immediately stop the activity. Early activities can accelerate blood circulation, so as to avoid venous thrombosis in patients. In addition, long-term bed rest may cause muscle atrophy, which can also be avoided through activities.

3. Drug management to ensure the effect of surgery

In order to further improve the recovery level of patients after coronary intervention, one should do a good job in drug management, which can greatly improve the effect of surgery. In the process of postoperative recovery, patients need to take a variety of drugs to avoid stent thrombosis, and the application level of drugs will also have a great impact on the recovery of patients [5]. Therefore, when carrying out nursing work, one should continue to strengthen their own awareness of drug management to ensure that patients can standardize medication. In practice, nursing staff should do a good job in the management of antiplatelet drugs.

In the postoperative recovery stage, antiplatelet therapy is an important part of preventing patients from thrombosis. Patients usually need to take aspirin combined with clopidogrel for treatment, patients should be clear about the necessity of taking this drug, nursing staff should do a good job of informing the work, at the same time, nursing staff also need to guide patients, so that patients can inform the doctor in time when they find abnormal conditions [6]. In addition, in patients before operation or other surgery, nursing staff should tell the doctor patients

taking antiplatelet agents, so that can let the doctor to timely adjust their own treatment. Not only such, nurses need to supervise and control the basic diseases in patients with drugs, some patients itself has some basic diseases, they in the daily maintenance, need to take some drugs, for example, some patients have diabetes or high blood pressure, nursing staff should be combined with the actual situation of patients, medication of patients with detailed records, if they appear adverse reactions, It can be done in a timely manner, which can virtually improve the standardization of patients' medication [7].

Nurses also need to communicate with patients more, so that patients can have a clearer awareness of medication and help them understand more drug knowledge, which can correct some patients' wrong cognition. Therefore, nurses can build a more perfect communication mechanism to visit patients' medication at any time and help them solve various problems in the process of medication in time.

4. Dietary regulation and nutritional intervention to promote vascular health

Diet is an important factor affecting the development of coronary heart disease. In postoperative nursing activities, one should help patients to further scientific diet, so as to achieve effective control of their blood lipids and blood pressure, and reduce the burden on the heart of patients. When regulating the diet of patients, one should follow the principle of individualization, combine the actual situation and eating habits of patients, and make reasonable adjustments to their diet content. In the diet planning, the nursing staff should ensure that the patient's diet is low in salt and fat. In fact, high salt and fat are important factors inducing the increase of blood pressure in patients [8].

Therefore, in the postoperative recovery stage, one should control the intake of patients and reduce the provision of pickled foods and high-salt condiments. One should try to use natural spices instead of salt and soy sauce in cooking. In addition, when providing fatty foods to patients, nursing staff should reduce the introduction of animal fat and fried foods and give priority to vegetable oils such as olive oil. Patients can eat some deep-sea fish appropriately every week, so that they can replenish fatty acids in time and regulate their lipid metabolism. In addition, dietary fiber can also effectively reduce patients' cholesterol and improve their intestinal function during the diet. To this end, in the process of nursing, one can try to introduce spinach, broccoli and other vegetables into the patient's diet, and provide them with whole grains as the staple food, and ensure that the patient's daily vegetable intake is not less than 500 grams [9].

High-quality protein is an important raw material for patients to repair their own bodies. Therefore, nursing staff need to provide patients with milk and soy products to ensure that patients can obtain high-quality protein in time. In the postoperative recovery stage, nursing staff should help patients develop good eating habits to avoid overeating, which may induce increased cardiac oxygen consumption. In addition, nursing staff should strictly limit smoking and alcohol consumption in patients during the postoperative period. Smoking may damage the vascular endothelium of patients, and alcohol can cause the fluctuation of blood pressure of patients. Therefore, nursing staff should make a personalized diet plan for patients according to their actual situation.

5. Exercise rehabilitation gradually improved cardiac function

Reasonable exercise is an important way to improve patients' cardiac function, and it is also an important part of the rehabilitation work after coronary intervention. Patients can enhance their cardiopulmonary function and reduce the risk of cardiovascular events through exercise. Therefore, nursing staff should be combined with the

actual situation of patients, provide the corresponding exercise program for them, at the time of patients with movement planning, nursing staff should be combined with the actual age and heart function in patients with, a more reasonable and scientific exercise plan, on the basis of reasonable patients can accept exercise intensity, ensure that patients do not feel tired. The exercise time can be from short to long, and the frequency should be from less to more [10].

The type of exercise can be mainly aerobic exercise. In addition, when providing an exercise program for patients, nurses should divide the exercise program into different stages. In the early stage, the patient's exercise can be based on light activity, mainly walking slowly indoors, and the purpose of exercise is to help patients further accelerate blood circulation, so as to avoid their blood clots. The purpose of exercise is to help patients further accelerate blood circulation, so as to avoid thrombosis. The exercise at this stage needs to be accompanied by someone, and the patients need to have adequate rest after exercise [11].

The second stage is the intermediate stage, can gradually increase the exercise of patients, patients can take a walk outside for half an hour every day, with some simple physical activities, this can significantly improve the patient's body coordination and cardiopulmonary function, if appear after exercise in patients with chest pain and shortness of breath, should stop moving in a timely manner. In about three months after surgery, patients can participate in some moderate intensity exercise, such as swimming and cycling, which can greatly improve the patient's exercise effect [12]. In the process of movement, nursing staff should do well in the clinical situation of monitoring, if patients appear problem, need to stop moving in a timely and sufficient rest. If the symptoms cannot be relieved after rest, patients need to seek medical advice in time. Therefore, nurses need to adjust the exercise plan for them in time according to the actual situation of different patients, so as to better improve the heart function of patients.

6. Psychological nursing to relieve emotional disorders to promote rehabilitation

After coronary intervention, many patients will worry about their condition, or do not adapt to the new lifestyle, thus feeling anxiety, depression and other negative emotions. These emotions may affect blood pressure and heart rate, increasing the burden on the heart and delaying recovery. Psychological care should start from three aspects of understanding, communication and support to help patients establish a positive attitude.

Nursing staff should understand the patient's psychological state through observation and listening, and identify the early signs of anxiety and depression, such as insomnia, irritability, low mood and unwillingness to communicate [13]. For patients' negative emotions, instead of simply comforting them, they should give empathic responses, such as "I understand your concern, many patients will feel this way after surgery", so that patients feel understood and accepted, and lay the foundation for subsequent intervention. Patients' negative emotions often come from the misunderstanding of the disease, such as "stents will shift", "cannot exercise after surgery", and "long-term medication will damage the liver" and so on.

Nursing staff should pass the one-to-one, granting the interpretation of the popular science manuals, lectures on rehabilitation, popularize knowledge of coronary intervention postoperative rehabilitation, to correct these misunderstandings, let patients understand the importance of scientific care and treatment, reduce unnecessary worries [14]. At the same time, the successful cases of rehabilitation should be shared to enhance the confidence of patients. Family members are the most important source of support for patients. It is necessary to guide family members to communicate with patients more and encourage them to participate in family activities, such as

cooking and chatting together, so as to avoid patients' loneliness due to the disease. In addition, patients can be encouraged to join coronary heart disease rehabilitation mutual support groups, through the exchange of experience and sharing of feelings with other postoperative patients, emotional support and practical guidance can be obtained.

For patients with serious emotional problems, they should be referred to psychologists in time for professional psychological intervention, such as cognitive behavioral therapy.

7. Strategies for preventing complications and long-term health management

Some problems may occur after PCI, such as stent thrombosis, restenosis, poor cardiac function, bleeding at the puncture site, hematoma, pseudoaneurysm, and more. These problems will affect recovery, so long-term management is needed to prevent them. For stent for thrombosis and restenosis, the key is to stick to antiplatelet drugs, lipid control, no smoking, avoid excessive overworked and emotional at the same time, learn to identify patients with acute thrombosis of the typical symptoms such as a sudden chest pain, chest tightness, sweating, and need to go to a doctor immediately. For complications at the puncture site, nursing should be strengthened in the early stage, and if local pain and swelling occur in the later stage, it is necessary to seek medical attention in time.

Cardiac insufficiency is manifested as fatigue, shortness of breath, lower limb edema, so it is necessary to control salt intake, avoid overwork, monitor body weight regularly, a sudden increase in a short period may indicate water and sodium retention, and take drugs to improve cardiac function according to doctor's advice. In terms of the construction of long-term health management system, it is necessary to transform the healthy habits during the postoperative rehabilitation period, such as low-salt diet, regular exercise, smoking cessation and alcohol restriction) into a long-term lifestyle, and family members need to participate in creating a healthy family environment. Want to regular monitoring of blood pressure, blood sugar, blood fat, at the same time through diet, exercise and medication to control within the scope of the target, to control weight, body mass index at 18.5–24.9 to avoid obesity[15]; In addition, it is necessary to follow up regularly according to the doctor's requirements such as electrocardiogram, echocardiography, coronary CT and actively inform the doctor of their symptoms and medication in order to adjust the treatment plan, and to cultivate the self-management ability of patients, so that they can learn to self-monitor such as measuring blood pressure, heart rate, recording symptoms, rational drug use and emergency treatment, such as use of nitroglycerin. In order to reduce the dependence on medical treatment.

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