



Clinical Analysis of Nursing Care of Acute Myocardial Infarction in Cardiovascular Medicine

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Abstract

Objective: In order to effectively improve the treatment and nursing effect of acute myocardial infarction, improve the cardiovascular function and psychological state of patients, to further explore the methods and effects of cardiovascular medical treatment and nursing of acute myocardial infarction, and to provide an effective reference for clinical practice. **Methods:** A total of 90 patients with acute myocardial infarction who were treated in the Department of Cardiovascular Medicine of our hospital from January 2020 to December 2020 were retrospectively analyzed. **Results:** Statistical research showed that after the two groups of patients took different nursing methods, the total nursing effective rate of the observation group through comprehensive nursing intervention was significantly higher than that of the control group, and the anxiety, depression scores, and the incidence of adverse reactions were lower than those of the control group., the length of hospital stay was shorter, and the data between the groups was significantly different, $P < 0.05$, indicating that there was a comparative significance. **Conclusion:** The analysis shows that comprehensive nursing intervention has significant nursing effect on patients with acute myocardial infarction, effectively shortening the hospitalization time of patients, reducing the incidence of adverse reactions, improving the psychological state of patients, and promoting the prognosis of patients, with good application value. The plan recommends vigorously promoting the application.

Keywords

Myocardial infarction; blood vessel; medical treatment; clinical nursing

In recent years, due to the serious harm of unhealthy lifestyles to people's health, the incidence of cardiovascular diseases has been gradually increasing, which has had a great impact on people's health and quality of life. Acute myocardial infarction is a common acute and severe cardiovascular disease in the clinical practice of cardiovascular medicine. Patients develop acutely and are in serious condition. If not treated in time, it will seriously threaten the patient's health and life safety [1, 2]. The clinical manifestations of acute myocardial infarction are sudden onset, followed by chest pain, tightness, nausea, vomiting, dizziness, fatigue and other symptoms. It may be complicated by severe arrhythmia, cardiogenic shock and pump failure, and may even lead to death. Effective treatment measures must be taken in time to save the patient's life. In recent years, with the rapid development of medical level and the continuous advancement of nursing technology, considering the special nursing needs of patients with acute myocardial infarction, the effect of conventional nursing intervention is not ideal. Effective comprehensive nursing can improve the patient's cardiovascular function, reduce the incidence of adverse reactions, improve the patient's adverse psychological state, promote the patient's prognosis, and thus improve the patient's quality of life. A retrospective analysis was conducted on 90 patients with acute myocardial infarction admitted to the Department of Cardiovascular

Medicine of our hospital from January to December 2020, and a control study of comprehensive nursing intervention and conventional nursing intervention was conducted. Clinical results showed that this study achieved satisfactory results. The specific contents are as follows.

1. Materials and methods

1.1 General information

A total of 90 patients with acute myocardial infarction who were treated in the Department of Cardiovascular Medicine of our hospital from January 2020 to December 2020 were retrospectively analyzed and divided into a control group and an observation group (45 cases in each group) according to the principle of basic data matching between the groups. There were 25 males and 20 females in the observation group; the age of the patients was (43-76) years old, with a mean age of (53.75±5.13) years old; there were 23 males and 22 females in the control group; the age of the patients was (41-74) years old, with a mean age of (52.58±4.53) years old; the data of the two groups were compared, $P > 0.05$, which was comparable.

1.2 Methods

(1) The control group received routine nursing intervention.

Nursing staff provide routine general nursing methods to carry out treatment, strictly observe the patient's condition and changes in vital signs, explain the inducing factors of the disease in detail to the patient, guide the patient to use medication correctly, inform the clinical doctor in a timely manner of relevant problems arising during the nursing process, and deal with them in a timely and effective manner to ensure the safe and smooth progress of nursing work.

(2) The observation group received comprehensive nursing intervention. The details are as follows:

① Psychological care. After the onset of the disease, patients suffer from physical discomfort such as squeezing pain in the precordial area and chest tightness due to the disease. They may feel like they are dying. In addition, they lack knowledge about the disease and treatment methods and worry about the prognosis of treatment. They are very likely to feel nervous, anxious, and fearful. This will increase the excitement of the patient's sympathetic nerves, increase blood pressure, and speed up the heartbeat, which will worsen the condition. Nursing staff should proactively discover the patient's negative psychological emotions in a timely manner, actively communicate in depth, and provide psychological counseling such as encouragement, listening, and comfort. Introduce to patients' previous successful cases of treating acute myocardial infarction complicated by malignant arrhythmias to improve patients' negative psychological problems and enhance their confidence in treatment. At the same time, establish a good nurse-patient relationship and improve patients' trust [3]. Eliminate patients' psychological anxiety, maintain a good and positive attitude to face the disease, strengthen patients' ability to control their emotions, and improve treatment compliance, so as to better cooperate with treatment [4].

② Medication care. Give the patient 300 mg of clopidogrel and 300 mg of aspirin, which should be chewed and taken orally [5, 6]. Choose to use 5000 IU of heparin bolus according to the patient's actual situation; for patients who meet the thrombolytic criteria, intravenous drip of 1.5 million IU of urokinase should be completed within 30 minutes; take 10 mg of atorvastatin orally before bedtime. One course of treatment is four weeks, and three courses of treatment are required [7]. Guide the patient to use the medication correctly, explain to the patient the effects and efficacy of the medication used, the correct time and dosage of various medications, the interval between two medications, and related precautions, etc.

③ Diet care. During treatment, according to the patient's nutritional status, a reasonable and healthy diet should be prepared for the patient to ensure balanced nutrition. The patient should eat small and frequent meals with a variety of types. The patient should eat more fresh fruits and vegetables, drink more water, reduce cholesterol, sugar, and salt intake, avoid overeating, reduce the patient's heart load, ban smoking and drinking, and change bad eating habits. Eating more crude fiber foods will help gastrointestinal motility, facilitate excretion, and avoid constipation.

④ Pain and oxygen nursing. Since patients may experience severe pain, nursing staff must pay attention to observing the location and nature of the pain and take symptomatic treatment measures. Generally, analgesics can be used to relieve the pain. For patients with severe conditions, the attending physician should be informed in a timely manner and treatment measures should be taken as soon as possible according to the doctor's orders. Patients may

also experience varying degrees of hypoxia, with symptoms such as chest tightness and shortness of breath. Oxygen nursing should be given to patients to relieve symptoms [8].

⑤ Health education. Develop targeted education plans, which can be conducted through one-on-one face-to-face communication, video playback, or distribution of brochures and other means of education and nursing intervention. Explain various disease-related knowledge to patients so that they can have a correct understanding of their own diseases. Patients should be patiently answered and satisfied with their various questions and needs. Instruct patients to do appropriate physical exercise, aerobic exercise, such as walking and Tai Chi, which can improve their physical fitness, maintain good sleep quality, and develop healthy living habits. At the same time, relevant discharge guidance should be done well, and patients should be informed to return to the hospital for regular follow-up examinations, and should be advised to be hospitalized immediately for examinations if they feel uncomfortable.

1.3 Observation indicators

In the course of this study, the effects of the two groups' different nursing plans were integrated and analyzed, and the nursing effectiveness, anxiety scores, depression scores, adverse reaction rates, and hospitalization time of the two groups of patients were compared, which served as the basis for reflecting the value of the research.

1.4 Statistical methods

All data in the survey were analyzed using SPSS23.0 system, where count data were replaced by $(\bar{x} \pm s, \%)$, and the difference between the two groups was compared using t and χ^2 tests. If the comparison result between the two groups is $P < 0.05$, it means that the experimental value is evident.

2. Results

2.1 Comparison of the incidence of adverse reactions between the two groups of patients

The observation group was 2 (2.67%), and the control group was 12 (26.67%). The observation group was significantly lower, $P < 0.05$, indicating that there was a comparative significance.

2.2 Comparison of nursing effectiveness between the two groups

The observation group had 43 (95.56%) and the control group had 33 (73.33%). The observation group had a significantly higher rate ($P < 0.05$), indicating that there was a significant difference in the comparison.

2.3 Comparison of anxiety and depression scores between the two groups of patients is shown in Table 1

Table 1. Comparison of anxiety and depression scores between the two groups of patients ($\bar{x} \pm s$, points)

Group	Number of cases	Anxiety score	Depression score
Observation group	45	32.15±3.12	34.25±2.69
Control group	45	52.19±4.26	52.16±3.75

2.4 Comparison of hospital stay between the two groups

The observation group was 14.23±3.72 (d), and the control group was 21.16±4.07 (d). The observation group was significantly shorter, $P < 0.05$, indicating that there was a significant contrast.

3. Discussion

Acute myocardial infarction has a high incidence rate, with symptoms such as heart failure and severe pain behind the sternum. The disease is dangerous, develops rapidly, and endangers the patient's life. It must be taken seriously [9, 10]. In recent years, due to the serious harm of unhealthy lifestyles to people's physical health, the incidence of cardiovascular diseases has been gradually increasing, which has a great impact on people's physical health and quality of life. Acute myocardial infarction has a rapid onset and rapid progression. As the disease progresses, it is very easy to cause sudden death in patients. It is necessary to carry out effective rescue measures and nursing

intervention for patients in a timely manner to minimize the harm of the disease to patients and provide protection for the safety of patients' lives. In the process of cardiovascular medicine treatment, it is very important to adopt comprehensive and effective nursing intervention methods for patients with acute myocardial infarction. With the continuous development and progress of nursing level, comprehensive nursing intervention has been widely used in clinical nursing work. Nursing intervention for patients with acute myocardial infarction through psychological care, medication care, diet care, pain and oxygen inhalation care, health education and other aspects can effectively improve patients' myocardial function, improve nursing efficiency, and promote patient prognosis. In this study, a retrospective analysis was conducted on 90 patients with acute myocardial infarction admitted to the Department of Cardiovascular Medicine of our hospital from January to December 2020, and a control study was conducted on comprehensive nursing intervention and conventional nursing intervention. The total nursing effectiveness rate of the observation group with comprehensive nursing intervention measures was significantly higher than that of the control group, and the anxiety and depression scores, and the incidence of adverse reactions were lower than those of the control group, and the hospitalization time was shorter, which played a good role in promoting the recovery of patients.

In summary, with the continuous development and progress of nursing level, comprehensive nursing intervention has a significant nursing effect on patients with acute myocardial infarction, effectively improving the patients' cardiovascular function and psychological state, fully demonstrating the advantages and characteristics of comprehensive nursing intervention. Essentially and effectively improve the quality of life of patients, it is recommended to vigorously promote this nursing program.

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