Nursing Intervention of Negative Emotion in Patients with Viral Hepatitis Treated with Interferon

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Abstract: Objective: To evaluate the effect of nursing intervention on negative emotion of patients with viral hepatitis treated with interferon. **Methods:** 72 patients with viral hepatitis in our hospital from May 2020 to May 2021 were selected and divided into the control group and the observation group according to the coin method, 36 cases/group, providing routine intervention for the control group and nursing intervention for the observation group. **Results:** The incidence of adverse reactions (Weight loss rate, leucopenia rate, thrombocytopenia rate and hair loss rate) in the observation group (5.56%) was lower than that in the control group (27.78%), ($P < 0.05$) with statistical significance. The SAS anxiety score (32.63 ± 3.25) and SDS depression score (31.25 ± 4.23) of the observation group were lower than those of the control group (41.15 ± 4.89) and (40.13 ± 4.89), and the PSQI sleep quality score of the observation group (5.01 ± 0.36) was lower than that of the control group (9.89 ± 1.25), ($P<0.05$) with statistical significance. The treatment compliance of the observation group (100.00%) was higher than that of the control group (83.33%), ($P < 0.05$) with statistical significance. **Conclusions:** The application of nursing intervention in the treatment of viral hepatitis patients with interferon can significantly improve the negative emotions of patients, which is worthy of promotion.
Keywords: Viral hepatitis; Interferon; Negative emotion; Nursing intervention

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1. Introduction

Viral hepatitis is a common disease in the liver system. Most of the diseases are caused by hepatitis C virus infection, and the prevalence rate of the disease after infection will be as high as 70%. Interferon is widely used in clinical treatment, but adverse reactions and serious negative emotions are prone to appear in interferon treatment, which needs to be paid more attention to in clinical practice [1,2]. In order to evaluate the effect of nursing intervention in the treatment of viral hepatitis patients with negative emotions, 72 patients with viral hepatitis in our hospital were selected to carry out the research.

2. Materials and Methods

2.1 Baseline Information

72 patients with viral hepatitis in our hospital were included in the study. The patients were divided into two groups by coin method from May 2020 to may 2021. The control group (36 cases) received routine intervention, and the observation group (36 cases) received nursing intervention. In the control group, there were 21 male patients and 15 female patients. The youngest was 25 years old, the oldest was 69 years old, and the average age was (46.65 ± 5.23) years old. In the observation group, there were 22 male patients and 14 female patients. The youngest was 24 years old and the oldest was 70 years old. The average age was (46.33 ± 5.72) years old. There was no significant difference in baseline data between the two groups ($P > 0.05$).

Inclusion criteria: (1) The patients met the diagnostic criteria of viral hepatitis; (2) The patient's age was more than 18 years old; (3) The patients' psychological stress level was normal, and they had good communication ability and expression ability.

Exclusion criteria: (1) Psychiatric patients; (2) Pa-

tients with hematological diseases; (3) Patients with history of sedative allergy in the first 3 months were enrolled.

2.2 Method

Two groups of patients with viral hepatitis were treated with interferon. The patients were provided with recombinant human interferon α2a suppository (Changsheng Dejia) produced by Changchun Institute of Biological Products Co., Ltd. with approval number: Guoyao Zhun Zi s19991019, specification: 500000 IU * 3 pieces. Before treatment, thyroid function test, blood glucose test, liver and kidney function test, urine routine test and blood routine test were provided for patients.Women (married and child-bearing) need to receive human chorionic gonadotropin test, and carry out treatment on the basis of confirming that patients meet the requirements of interferon treatment.Using subcutaneous injection, the dose is once a week, each time the dose is 180μg.

In the control group, patients were given routine intervention to observe whether there were adverse reactions during the treatment. If there were adverse reactions, doctors should be informed in time for treatment and drug education.

In the observation group, the patients were given nursing intervention. (1) Before the use of nursing, we need to explain the indications, treatment effect and possible adverse reactions of interferon for patients before treatment, let patients know the side effects of interferon, combined with the understanding ability of patients, carry out propaganda and education for patients, inform patients that the adverse reactions are temporary, do a good job in the observation of patients' emotions, and improve the degree of cooperation of patients. (2) During the treatment, the patients need to take medicine according to the doctor's advice. During the injection, the injection position needs to be changed frequently to reduce the patients' muscle pain and local reaction. Fatigue and muscle soreness will appear in 3-8 hours after interferon injection, so we can adjust the time of drug injection for patients to spend adverse reactions in sleep. In addition, provide necessary psychological nursing intervention for patients, pay attention to the emotional changes of patients, strengthen propaganda and education, guide patients' self-health detection and nursing, actively answer patients' questions, reduce patients' stress reaction. (3) The nursing after drug withdrawal, under the guidance of the doctor, should be followed up regularly after drug withdrawal. After drug withdrawal, thyroid function should be detected every 3 months, and liver function should be detected every 6 months.

2.3 Observation Index

(1) The incidence of adverse reactions including weight loss, leucopenia, thrombocytopenia and alopecia were calculated. (2) SAS anxiety score, SDS depression score and PSQI sleep quality score were calculated. SAS score, SDS score and PSQI score were inversely correlated with anxiety, depression and sleep quality. (3) The treatment compliance of the two groups was calculated. The evaluation standard of compliance: according to the patient's compliance with the doctor's advice, it can be divided into non-compliance, partial compliance and complete compliance.

2.4 Statistical Processing

Statistical software spss23.0 was used to process the data of two groups of patients with viral hepatitis. The incidence of adverse reactions and treatment compliance (%) were expressed, and the differences between groups were analyzed by chi square test.SAS score, SDS score and PSQI score were expressed by (mean ± SD), and the differences between groups were analyzed by t test.With statistical significance, then ($P < 0.05$).

3. Results

3.1 Two Groups of Patients with Viral Hepatitis Incidence of Adverse Reactions Compared

As shown in Table 1, the incidence of adverse reactions in the control group was significantly higher than that in the observation group, with significant difference between groups, ($P < 0.05$) with statistical significance.

Table 1. Comparison of the incidence of adverse reactions between the two groups {n (%)}

Group	Weight loss	Leukopenia	Thrombocytopenia	Alopecia	Adverse reaction rate
Observation group (n = 36)	2(5.56)	0(0.00)	0(0.00)	0(0.00)	2(5.56)
Control group (n = 36)	5(13.89)	2(5.56)	2(5.56)	1(2.78)	10(27.78)
χ^2value	-	-	-	-	6.4000
P value	-	-	-	-	0.0114

3.2 The Bad Mood and Sleep Quality of Two Groups of Patients with Viral Hepatitis were Compared

As shown in Table 2, there was no significant difference in the bad mood and sleep quality between the two groups before nursing. There was no statistical significance (P > 0.05). After nursing, the SAS score, SDS score and PSQI score of the observation group were lower than those of the control group, and there was significant difference between the two groups, (P < 0.05) with statistical significance.

3.3 Comparison of Treatment Compliance between Two Groups of Patients with Viral Hepatitis

As shown in Table 3, the treatment compliance of the control group was lower than that of the observation group, and there was significant difference between the two groups, (P < 0.05) with statistical significance.

Table 2. Comparison of bad mood and sleep quality between two groups of patients with viral hepatitis {($\bar{x}$ ±s)score}

Group	SAS score		SDS score		PSQI score	
	Before nursing	After care	Before nursing	After care	Before nursing	After care
Observation group (n = 36)	58.69±6.23	32.63±3.25	59.64±7.52	31.25±4.23	15.46±2.22	5.01±0.36
Control group (n = 36)	58.49±6.11	41.15±4.89	59.49±7.55	40.13±4.89	15.29±2.19	9.89±1.25
T value	0.1375	8.7064	0.0844	8.2404	0.3270	22.5090
P value	0.8910	0.0000	0.9329	0.0000	0.7446	0.0000

Table 3. Comparison of treatment compliance between two groups of patients with viral hepatitis {n (%)}

Group	Noncompliance	Partial compliance	Full compliance	Compliance rate
Observation group (n = 36)	0 (0.00)	12 (33.33)	24 (66.67)	36 (100.00)
Control group (n = 36)	6 (16.67)	19 (52.78)	11 (30.56)	30 (83.33)
X2 value	-	-	-	6.5455
P value	-	-	-	0.0105

4. Discussion

Interferon is a common drug in the treatment of viral hepatitis. It has a wide range of application and significant curative effect. It is recognized as an effective drug in clinic. However, the treatment of interferon is more expensive, prone to many adverse reactions, patients will appear great negative emotions during the treatment [3]. Providing effective nursing intervention during the treatment of patients with viral hepatitis has a positive effect on improving the adverse reactions and negative emotions of patients. The incidence rate of viral hepatitis is high, patients have a long time of illness and need long-term medication. In addition, patients in long-term treatment are vulnerable to disease interference, adverse reactions, affect sleep and mood, reduce the quality of life of patients [4,5]. Nursing intervention, through the use of pre care can better help patients prepare for psychological, reduce the stress of patients, improve patient compliance. Through the nursing during the treatment, it can reduce the local reactions and adverse reactions of patients, actively communicate with patients, and strengthen the detection, which can reduce the adverse emotions and psychological problems of patients [6]. Through the nursing after drug withdrawal, patients can be informed to take active and regular detection to reduce the adverse reactions of patients [7]. According to the results of this study, the incidence of adverse reactions such as weight loss rate, leucopenia rate, thrombocytopenia rate and hair loss rate in the observation group were lower than those in the control group, the SAS anxiety score and SDS depression score in the observation group were lower than those in the control group, the PSQI sleep quality score in the observation group was lower than that in the control group, and the treatment compliance in the observation group was higher than that in the control group, (P < 0.05) with statistical significance.

In conclusion, the nursing intervention of negative emotions in patients with viral hepatitis during interferon treatment can effectively improve the compliance of patients, improve the bad mood and sleep quality of patients, reduce the incidence of adverse reactions, and has the value of use and promotion.

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