



# Evaluation on application effect of psychological nursing intervention on patients with traumatic endophthalmitis

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**Background:** To explore the application effect of psychological nursing intervention in patients with traumatic endophthalmitis.

**Methods:** A total of 90 patients with traumatic endophthalmitis admitted to our hospital from August 2018 to April 2019 were selected as study objects and randomly divided into observation group and control group, with 45 cases in each group. The control group received routine nursing care, and the observation group performed psychological nursing intervention on the basis of the control group. The scores of self-rating anxiety scale (SAS) and self-rating depression scale (SDS) and nursing satisfaction degree were compared before and after nursing treatment in two groups.

**Results:** The scores of SAS and SDS of the observation group were better than those of the control group. The score of the nursing satisfaction degree of the observation group was higher than that of the control group, showing statistically significant difference ( $P < 0.05$ ).

**Conclusions:** Psychological nursing intervention can improve the physical and mental condition of patients with traumatic endophthalmitis, reduce their negative emotions such as anxiety and depression, and improve the satisfaction of nursing. It is worthy of clinical promotion.

**Keywords:** Psychological nursing intervention; traumatic endophthalmitis; physical and mental condition

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## Introduction

Traumatic endophthalmitis is a serious inflammatory reaction caused by pathogen-induced injury directly into the eye, which is a serious complication causing blindness of uveal and retinal purulent inflammation induced by ocular trauma (1). The inflammatory reaction develops rapidly and can rapidly affect the eyeball and surrounding soft tissues and develop into periocular inflammation. In severe cases, the patients may lose vision and atrophy of the eyeball, and even the eyeball enucleation (2). Patients often have negative emotions such as fear and anxiety, which is not conducive to the development of clinical treatment. This article aims to explore the application effect of psychological

nursing intervention in the nursing for patients with traumatic endophthalmitis.

## Methods

### *Basic information*

Totally 90 patients with traumatic endophthalmitis admitted to our hospital from August 2018 to April 2019 were selected as study objects. Vitreous opacity or empyema occurred in all the above patients. In this study, 90 patients were randomly divided into observation group and control group, with 45 cases in each group, including observation group patients aged 12–55 years, 29 male patients and

16 female patients, with mean age of (36.7±3.1) years. For the educational background, there were 5 patients with primary and lower educational level, 15 with junior high school, 18 with high school and 7 with college and above level. In the control group, the patients were 16–58 years old, with an average age of (38.3±2.5) years, 27 males and 18 females. There were 3 with primary and lower education level, 16 with junior high school, 20 with high school, and 6 with colleges and above. There was no significant difference in the normal information like age, gender and severity of the disease between the two groups, and they were comparable ( $P>0.05$ ). It has been excluded from those with immune system diseases, those with vital systemic diseases combined with important organs such as heart, brain and kidney, those with mental history, and those who could not cooperate with data collectors during the trial. The selected patients were all informed and agreed to participate in this study.

### *Nursing measures*

Patients in both two groups were fully dilated. We controlled inflammation using high-dose, broad-spectrum, and high-intraocular permeability antibiotics (3). The control group received routine nursing, including condition observation and medication guidance, etc. The observation group was added with psychological care on the basis of routine nursing. Specific measures include the following:

#### **Cognitive intervention**

We explained the relevant knowledge of traumatic endophthalmitis to patients with easy-to-understand language, including etiology, symptoms, preventive measures and treatment methods that can be taken in daily life, so that patients can correctly understand traumatic endophthalmitis and reduce their fear (4).

#### **Dietary guidance**

During the treatment period, the diet is mainly based on light food, reducing the consumption of greasy, spicy and irritating food, and eating more foods with rich cellulose and vitamins.

#### **Environmental adaptation**

Help patients to be familiar with the hospital environment, strive to create a warm and harmonious hospitalization

atmosphere, eliminate the tension and rejection during the treatment period, and understand the patient's everyday life needs, and make them feel the warmth of home.

#### **Emotional support**

Most patients with traumatic endophthalmitis have different levels of negative emotions. The nursing staff should maintain sufficient patience, actively listen to the patients' complaints, and give soothing measures to alleviate their psychological and mental stress. If the patients have more professional medical problems, the nursing staff should give a non-conclusion evaluation, analyze their advantage according to the specific situation, stimulate the potential ability, and improve their confidence of rehabilitation (5).

#### **Family care**

Excessive anxiety and tension of family members may also affect the psychology of patients to a certain extent. Thus, nursing staff must fully understand the family members' mood, provide health education for them in simple and easy-to-understand language, and inform family members the importance of remaining calm, explaining the patients' condition to them to achieve their understanding and cooperation for treatment (6).

#### **Observation indicators**

The self-rating anxiety scale (SAS) and self-rating depression scale (SDS) were used to evaluate the patients' physical and mental condition (7). The self-designed nursing satisfaction questionnaire of our hospital was used to evaluate the patients' nursing satisfaction degree. The indicators included: inpatient environment, nursing staff attitude, nursing process, quality of care, etc. The score of 0–1 is divided into dissatisfaction, 2–3 is divided into general, and 3–5 considered as satisfaction. The higher the score, the higher the satisfaction of nursing. The SAS and SDS scores and satisfaction of nursing work before and after treatment were compared between the two groups.

#### **Statistical analysis**

The experimental data was processed using SPSS 20.0 statistical software. The ranked data was analyzed by rank sum test. The measurement data was expressed by ( $\bar{x}\pm s$ ). The *t*-test was used. The count data was expressed as a

**Table 1** Comparison of SAS and SDS scores before and after nursing in two groups

	Number of cases (n)	SAS score		SDS score	
		Before	After	Before	After
Observation group	45	57.2±7.2	43.5±5.1	60.9±8.3	48.2±7.0
Control group	45	58.0±7.1	49.6±4.8	61.2±7.7	55.7±6.8
P		<0.05	<0.05	<0.05	<0.05

SAS, self-rating anxiety scale; SDS, self-rating depression scale.

**Table 2** Comparison of nursing satisfaction degree between two groups

	Number of cases (n)	Nursing attitude	Nursing process	Quality of care	Inpatient environment
Observation group	45	49.5±4.3	48.9±5.1	37.1±3.6	36.2±2.7
Control group	45	40.5±3.7	42.1±4.8	30.5±3.6	28.6±2.4
P		<0.05	<0.05	<0.05	<0.05

SAS, self-rating anxiety scale; SDS, self-rating depression scale.

percentage (%), and the  $\chi^2$  test was used. And  $P < 0.05$  was considered statistically significant.

## Results

### *Comparison of SAS and SDS scores before and after nursing in two groups*

There was no significant difference in scores of SAS and SDS between the two groups ( $P > 0.05$ ). The SAS and SDS scores of the observation group were better than those of the control group ( $P < 0.05$ ), showing that the nursing program added with psychological care can improve the psychological state of patients and improve their prognosis quality, as shown in *Table 1*.

### *Comparison of nursing satisfaction degree between two groups*

The scores of the inpatient environment, nursing staff attitude, nursing process, and nursing quality of the observation group were higher than those of the control group, and the difference was statistically significant ( $P < 0.05$ ) (*Table 2*).

## Discussion

Once traumatic endophthalmitis occurs, the impact on vision and visual function is extremely serious. Due to acute

onset and poor prognosis, most patients often have negative emotions such as anxiety, pessimism and even depression. Conventional treatment generally adopts a program of using antibiotics to control inflammation after full mydriasis, and has achieved satisfactory clinical efficacy. On the basis of the treatment plan combined with effective psychological nursing intervention we can effectively improve the patients' treatment effect and alleviate their negative psychology, and improve their physical and mental condition. In our study, through the implementation of psychological nursing interventions including psychological relief, life care, health education, diet guidance, etc., that is, based on the intervention of routine monitoring of basic life indicators, we pay attention to treat the patients with amiable attitude, and give them and their family members health education, correct the wrong understanding of the disease, create a harmonious and warm hospital environment, guide patients to develop a reasonable diet plan, perform psychological counseling for patients with strong negative emotions, help patients establish a relaxed and optimistic attitude, and encourage them to actively participate in treatment (8).

The study found that the SAS and SDS scores of the observation group were better than those of control group, the difference was statistically significant ( $P < 0.05$ ); the scores of inpatient environment, nursing staff attitude, nursing process, and nursing quality were higher than those of the control group, showing significant difference ( $P < 0.05$ ), suggesting that comprehensive and effective psychological

nursing intervention can improve the psychological state of patients with traumatic endophthalmitis, improve their awareness of the disease, promote the physician-patient relationship to be harmonious and improve clinical nursing satisfaction degree, which is worthy of widespread promotion in the clinic.

At the same time, due to the influence of time, resources and manpower, this study has certain limitations. First, the sample size is small, and the analysis results have certain limitations. The reliability of the data needs to be verified by further expanded sample size. Second, the reliability and validity of the self-made nursing satisfaction questionnaire needs to be further tested. Third, this study did not formulate a fully personalized psychological care program based on the patients' age, gender, personality, knowledge level and other aspects. Nurses were based on the same training and process to implement psychological nursing intervention, and the evaluation of the application effect of personalized psychological nursing intervention needs further study.

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### Footnote

*Conflicts of Interest:* Both authors have completed the ICMJE uniform disclosure form (available at <http://dx.doi.org/10.21037/aes.2019.08.03>). The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. The study was conducted in accordance with the Declaration of Helsinki (as revised in 2013). The study was approved by the Research Ethics Committee of Zhongshan Ophthalmic Center of Sun

Yat-sen University (20180509V2.0). The selected patients were all informed and agreed to participate in this study.

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