

The Effect of Intensive Psychological Nursing on the Mood and Solutions of Spinal Tuberculosis Patients

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Abstract: Objective: To investigate the effect of intensive psychological nursing on the mood and coping ways of spinal tuberculosis patients. **Methods:** The clinical data of 102 patients undergoing spinal tuberculosis surgery in our hospital from February 2017 to January 2020 were retrospectively analyzed. All the cases were grouped according to different nursing plans, patients who received routine care were included in the control group ($n = 50$), and the ones with intensive psychological care were included in the observation group ($n = 52$). Compare negative emotions after nursing [assessment using self-assessment scale of anxiety (SAS), depression self-assessment scale (SDS)] and solutions [assessment using medical response questionnaire (MCMQ)] of the two groups. **Results:** After nursing, the SAS, SDS scores, avoidance and yield scores of the two groups were reduced, and the coping scores were increased, and the change of the observation group was greater than that of the control group, the difference was statistically significant ($P < 0.05$). **Conclusion:** Spinal tuberculosis surgery patients were treated with intensive psychological care, which can relieve patients' negative emotions, improve solutions and are worthy of clinical use.

Keywords: Spinal tuberculosis; Surgery; Intensive psychological care; Negative emotions; Solutions

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Spinal tuberculosis is a secondary disease, accounting for the first place of all bone and joint tuberculosis, of which vertebral tuberculosis accounts for the

majority, and accessory tuberculosis is very rare. The disease starts slowly with symptoms of low fever, fatigue, weight loss, night sweats, loss of appetite and anemia and the pain often appear first. Clinical treatment includes non-surgical treatment and surgical treatment, the former includes systemic anti-tuberculosis treatment and local braking usually combining the two anti-tuberculosis drugs for a long treatment period. However, for patients with surgical indications, surgical treatment can be used to clear the lesion for bone healing^[1-2]. It is reported that patients with this type of disease have more adverse emotions, mainly including anxiety, fear, and depression, many of which can indirectly affect the surgical effect and patient prognosis, and psychological care has been widely accepted and applied. Long-term medical practice has proved that psychological care plays an important role in promoting the rehabilitation of patients. Based on this, the impact of intensive psychological care on the mood and solutions of patients with spinal tuberculosis surgery was analyzed as follows.

1 Materials and methods

1.1 General materials

The clinical data of 102 cases undergoing spinal tuberculosis surgery treated in our hospital from February 2017 to January 2020 were retrospectively analyzed, all patients were divided into various groups according to different nursing plans, and patients who received routine care were included into the control group ($n = 50$), patients with intensive psychological care were included in the observation group ($n = 52$). In the control group, there were 31 cases of male and 19 cases of female, ages varying

from 35 to 67 years, with an average age of (47.64 ± 5.29) years; 34 cases of lumbar spine tuberculosis, 14 cases of thoracic spine tuberculosis, and 2 cases of cervical spine tuberculosis. In the observation group, there were 33 cases of male and 19 cases of female; aged between 35 and 66 years, with an average age of (47.59 ± 5.32) years; 35 cases of lumbar spine tuberculosis, 15 cases of thoracic spine tuberculosis, and 2 cases of cervical spine tuberculosis. Compared the general data of the two groups, the difference was not statistically significant ($P > 0.05$), which was comparable.

1.2 Inclusion criteria

(1) Inclusion criteria: All were diagnosed by MRI and CT imaging examination; All had surgical indications and were highly positive in this study; None had mental illness. (2) Exclusion criteria: People with obstacles such as consciousness, intelligence, and communication; People with severe infection; People with other important organs.

1.3 Methods

1.3.1 Routine care of the control group

Follow the doctor's instructions to prepare the patient for 2-4 weeks of anti-tuberculosis drugs, inform the patient of the necessity of medication, possible adverse reactions during the medication and related preventive measures, and instruct the patient to diet before surgery, mainly with high-protein, high-fiber, high-calorie and easily digestible foods, such as milk, lean meat, fish, and have more fresh vegetables and fruits, tell them to rest in bed before surgery, and demonstrate their guidance on effective breathing, bed diet, etc., reduce the occurrence of pain and aggravation of the disease.

1.3.2 The observation group

Adding intensive psychological care based on the control group: (1) The nurses communicated with the patients in an approachable way, such as kind words, easy-to-understand and smiling, learn about the inside thoughts of patients and have access to their trust; (2) Health education, explain relevant knowledge of the disease, surgical treatment process, operational environment, surgical position, etc., making the patients can reasonably understand the surgical treatment, to guide and answer the patient's questions with professional technical knowledge, guide them

to familiarize with the operating room environment, eliminate a sense of unfamiliarity and their worries and doubts during the surgical treatment; (3) Explain the importance of positive optimism and stable emotions, and encourage them to relief their emotions in proper way such as talking, listening to music and respiratory therapy, establishing an optimistic attitude to receive treatment; (4) Encourage the patient's family to care, encourage, and support them, helping them feel the warmth of affection; (5) Introduce classic surgical success cases to the patient and the family, recommending the successful patient to offer advice; (6) Form the patients into a communication group, where 4-5 patients are selected in turn as the communication service objects every day. First, the patients talk about own rehabilitation situation and psychological problems, encouraging patients of the same ward to speak freely to provide psychological support and peer education, thus increasing confidence in defeating disease.

1.4 Evaluation index

(1) Before and after nursing, compared the negative emotions of the two groups, and evaluated the self-assessment scale for anxiety (SAS) and self-assessment scale for depression (SDS). For SAS, score of 50-59 is mild anxiety, score of 60-69 is moderate anxiety; score of > 69 is severe anxiety. The higher the score, the greater the anxiety and depression. For SDS, score of 53-62 is mild depression; 63-72 is moderate depression and score of > 73 is severe depression. The higher the score, the greater the anxiety and depression. (2) The medical response questionnaire (MCMQ) should be filled out by patients before and after nursing, and one of the four answers attached to each item is chosen according to the patient's own situation, each item is 1-4 points, facing scale points are accumulated by the items of 1,2,5,10,12,15,16,19; avoidance scale points are accumulated by the items of 3,7,8,9,11,14,17; yield scale points are accumulated by each item of 4, 6, 13, 18 and 20. There were 20 test questions and 3 coping ways. The higher the face score and the lower the avoidance and yield scores, the better the coping ways.

1.5 Statistical method

The SPSS22.0 software was used for data processing to represent measurement data as. Independent

sample t was tested between groups and paired sample t test was used within groups. $P < 0.05$ was considered as statistically significant.

2 Results

2.1 Negative emotions

The SAS and SDS scores after nursing of the two groups decreased, and the observation group was lower than the control group, the difference has statistical significance ($P < 0.05$). See Table 1.

Table 1. Comparison of negative emotions between the two groups ($\bar{x} \pm s$, point)

Time	Group	SAS	SDS
Before nursing	Control group (n=50)	61.74±5.29	64.27±3.86
	Observation group (n=52)	61.58±5.13	64.32±3.81
	<i>t</i>	0.155	0.066
	<i>P</i>	0.877	0.948
After nursing	Control group (n=50)	52.17±3.85	56.81±2.97
	Observation group (n=52)	43.69±2.74	48.75±1.83
	<i>t</i>	12.855	16.571
	<i>P</i>	0.000	0.000
<i>t/P</i> Comparison of nursing before and after in control group		10.343/0.000	10.831/0.000
<i>t/P</i> Comparison of nursing before and after in observation group		22.182/0.000	26.564/0.000

2.2 Solutions

The scores of both groups after nursing increased, and the avoidance and yield scores decreased. The

change of the observation group was greater than that of the control group, and the difference has statistical significance ($P < 0.05$). See Table 2.

Table 2. Comparison of coping ways of patients in two groups ($\bar{x} \pm s$, score)

Time	Group	Facing	Avoiding	Surrendering
Before nursing	Control group (n=50)	13.75±2.69	21.68±3.72	16.53±2.48
	Observation group (n=52)	13.64±2.77	21.71±3.65	16.49±2.53
	<i>t</i>	0.203	0.041	0.081
	<i>P</i>	0.839	0.967	0.936
After nursing	Control group (n=50)	15.14±2.39	18.54±3.27	14.34±2.07
	Observation group (n=52)	18.49±2.53	15.15±3.08	11.52±1.86
	<i>t</i>	6.869	5.392	7.243
	<i>P</i>	0.000	0.000	0.000
<i>t/P</i> Comparison of nursing before and after in control group		2.732/0.008	4.483/0.000	4.794/0.000
<i>t/P</i> Comparison of nursing before and after in observation group		9.323/0.000	9.905/0.000	11.413/0.000

3 Discussion

The main causes of preoperative anxiety in spinal tuberculosis patients are disease and economic factors. Patients often worry about the undesirable consequences before operation, however, they need to rest in bed and defecate. The above all rely on the help of family members, it is easy for them to be pessimistic and depressed, worry about the impact of work and family, lose confidence in life, and do not want to communicate with others leading to autism, and the cost of expensive surgery and medication after operation have caused some patients to have a heavier burden and feel more urgent to look forward to successful surgery^[3-4].

It showed in this study that the SAS, SDS scores, avoidance and yield scores of the two groups decreased after nursing, and the change of the observation group was greater than that of the control group, indicating that intensive spinal tuberculosis surgery patients can relieve patients' emotions and improve solutions. With the development of modern medicine, the medical model and nursing concepts have undergone essential changes, varying from valuing disease to overall physical and mental care, nursing workers have been gradually attached importance to psychological care, showing the necessity of psychological care in nursing work^[5]. Psychological nursing is to use multi-disciplinary knowledge to deal with the psychological reactions of patients, and make adjustments according to that

of patients to better complete the nursing work^[6]. It is common for patients with spinal tuberculosis surgery to have anxiety and depression, which will lead to decreased surgical endurance and affect patient recovery. Moreover, there have been deviations in solutions of patients with spinal tuberculosis, and negative methods bring negative emotions. Some studies have found that the poor coping way under high stress has greater risk of psychological damage to patients and more serious impact on rehabilitation^[7-8]. Apply intensive psychological care in it, through own behavior, language, attitude, expression and posture, the nursing staff try to affect the patient's psychological state and behavior, enlighten them, understand the actual condition of their families, trying to solve their worries. In the communication with patients, nurses are warm and friendly, sincere and polite, fully playing the positive role of nurses to help patients reduce and eliminate negative emotions, enhance confidence in defeating the disease, get inside the patients' hearts, and have their trust^[9-10]. Instruct patients to have correct venting methods for psychological problems, understand the disease in the right way, conduct disease-related knowledge lectures, encourage patients and the families to participate together, improve understanding of the disease, and reach an agreement. The accompanying and support of the family strengthen the patient's confidence in the disease treatment, and reassure concerns in the process of treatment, benefiting to the recovery of the patient's disease. Positive treatment attitude, mastery of disease knowledge of the patient can lead to a more active approach to cope with it, overcome psychological obstacles, be brave to face the disease, and cooperate with the medical staff positively to have treatment, thus better promoting postoperative recovery^[11-12].

In conclusion, the use of intensive psychological care for patients undergoing spinal tuberculosis surgery can alleviate their negative emotions and improve solutions, which is worthy of clinical promotion and use.

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