

## **Application of high quality nursing service mode in care of neurosurgical patients with tumor.**

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### **Abstract**

**Objective:** To study application effect of high-quality care service mode in the care of neurosurgical patients with tumor.

**Methods:** 136 cases of neurosurgical patients with tumor treated during October 2014~October 2015 were chosen as the study subject. Patients were divided randomly into two groups: observation group and control group, 68 cases in each group. Conventional care was given to the study subject in observation group and high-quality care mode was given to the study subject in control group. Observation targets included incidence rate of complication, patient satisfaction rate and care quality.

**Results:** There were 15 cases had complication in control group (22.1%) and 5 cases in observation group (7.4%). Respectively 50 cases and 60 cases in control group and observation group were satisfied with high-quality care service mode, and satisfaction rate of two groups were 73.5% and 92.64% respectively, which observation group was higher than control group, and the difference between the two groups was statistically significant.

**Conclusion:** Applying high-quality care into neurosurgical patients with tumor is helpful for rapid postoperative recovery of the patients, which can effectively improve care service quality and reduce complication incidence in neurosurgical patients. Meanwhile, it also improves care satisfaction from the patients, which has higher clinical value and should be extensively applied and actively studied.

**Keywords:** High-quality care, Neurosurgery, Brain tumor, Complication.

*Accepted on November 24, 2016*

### **Introduction**

Intracranial tumor, namely, the general term of intracranial space-occupying lesions are all kinds of brain tumor. As one of the most common neurological diseases, it seriously threatens the health of people, which can be divided into primary and secondary intracranial tumor [1,2]. In recent years, with the development of related technologies, operation of brain tumor has been widely carried out in basic-level hospitals, and giving proper care for patients in preoperative period is of vital importance. Whole course high-quality care is a kind of mode which targets at the best feeling of patients and allows whole course care of the primary nurse [3,4]. It can make the patients reach the best status both psychologically and physically, so that to speed up recovery [5,6]. The paper is based on patients of our hospital to explore application effect of whole course high-quality care mode in neurosurgical patients with brain tumor in preoperative period.

### **Materials and Methods**

#### **Materials**

136 cases of neurosurgical patients with tumor treated in our hospital during October 2014~October 2015 were chosen as the study subject. 78 males and 58 females; age 23~72, average 41.6 years old. 136 cases were randomly divided into control group and observation group and, 68 cases in each. There was no significant difference ( $p>0.05$ ) between two groups, so it's of comparative.

#### **Method**

Firstly, guidance after admission. After admission, patients should get warm reception from nurses. Nurses should warmly introduce the hospital and ward environment, also include self-introduction and introduction of related personnel, such as attending doctor, etc., so as to gradually eliminate the strangeness. Moreover, nurses should provide comfortable and quiet ward environment for the patients [7,8]. Ventilate the ward from time to time can effectively improve the comfort of the patients. Secondly, body care. Nurses should monitor the

blood pressure, heart rate, intracranial pressure, pulse, oxyhemoglobin saturation and breathing of the patients on a regular basis, as well as give the patients with reducing intracranial pressure and trophic nerve treatment. Thirdly, psychological care. Nurses should strictly adhere to the care principle of focusing on patients. Communicate with patients patiently to timely understand the demand of patients to give them effective concerns and help, gradually establish a chat mode of care, so that to dispel bad feelings of tension and anxiety of the patients [9]. At the same time, nurses should carefully observe all aspects of patients during nursing care, timely offer help and encouragement to the patients and satisfy their various needs as far as possible to establish good relations between patients and nurses. Fourthly, build up family support system. Nurses should strengthen health education for families of patients, patiently explain related knowledge about the disease to patients [10], so as to make families of patients realize the influence of their concerns, comfort and care for the patients' condition; make families of patients actively cooperate with the hospital to make corresponding emotional adjustment and build up family support system for the disease. Fifthly, health education. Nurses should develop targeted health education mode based on characteristics of personality and educational level of the patients [11]. They can give health education to the patients by setting bulletin board, giving out health knowledge brochures and holding health knowledge lectures, etc. To improve disease cognition level of the patients, making them learning the effectiveness and important of the treatment, so that to improve patient compliance efficiently, which will be helpful for the patients to develop healthy lifestyle [12].

### **Evaluation index [13-15]**

Making evaluation and comparison from incidence rate of the complication, care service quality for patients and care satisfaction of patient. Care service quality is evaluated on the basis of care service assessment and score table. Care quality assessment score table mainly includes four items: one is assessment of hospital system, accounting for 50 points; second is assessment caring report, accounting for 20 points; third is assessment of care safety, accounting for 30 points; fourth is drug safety assessment, accounting for 20 points. Total points of the assessment are 100. Through above four items assessment to make evaluation on overall assessment of high-quality care service in neurosurgical care of nurses. Patients' care satisfaction will be evaluated on the basis of questionnaire laid out by our hospital, the content of which include environment satisfaction, psychological care satisfaction, health education satisfaction and overall satisfaction.

### **Statistics**

The data is processed with SPSS 22.0 statistical software, measurement data is expressed with ( $\bar{x} \pm s$ ), tested with  $t$ ,

enumeration data is expressed with (%), tested with  $\chi^2$  and  $p < 0.05$  is the difference is statistically significant.

## **Results**

### **Complication**

Observation group had 2 cases with pulmonary infection, 3 cases with constipation and incidence rate of complication was 7.4%; control group had 2 cases with postoperative constipation, 5 cases with pressure sore, 2 cases with postoperative cerebral haemorrhage, 6 cases with pulmonary infection and incidence rate was 22.1%. There were statistical significant in terms of incidence of complication ( $p < 0.05$ ) (Table 1). 50 cases (50%) in control group were satisfied with the care, observation group had 63 cases, satisfaction rate of observation group was higher than control group, the difference was statistical significant ( $p < 0.05$ ).

**Table 1.** Comparison of complication and incidence rate in two groups.

Category of complication	Observation group (n=68)	Control (n=68)	group
Constipation	3	2	
Pressure sore	0	5	
Cerebral haemorrhage	0	2	
Pulmonary infection	2	6	
subtotal (incidence rate*100)	5 (7.35)*	15 (22.06)	

\* $p < 0.01$ , incidence rate of complication between observation group and control group has significant statistical difference.

### **Assessment of high-quality care service quality**

Comparison of care quality assessment and scoring of two groups of patients. After observation group employed high-quality care mode, its assessment score in terms of hospital system, care report, care safety, drug safety and overall assessment was superior to that in the control group, and difference between this two groups was statistically significant ( $P < 0.05$ ) (Table 2).

### **Comparison of nursing satisfaction of two groups of patients**

After applying high-quality care mode for 68 cases in the observation group, psychological care satisfaction and overall care satisfaction were significantly superior to another 68 cases in the control group employing conventional care mode, difference between them was statistically significant ( $P < 0.05$ ) (Table 3). There's no statistically significance between two groups in terms of health education and environment satisfaction. The assessment score were conducted in terms of hospital system, care report, care safety, drug safety and overall assessment was superior to that in the control group, and

difference between this two groups was statistically significant ( $p < 0.05$ ).

**Table 2.** Assessment and score comparison of nursing quality in two groups of patients.

Group	Case No.	Hospital regulation	Nursing report	Nursing safety	Drug safety	Overall
Observation	68	28.2 ± 2.6	17.9 ± 1.5	27.5 ± 2.4	19.64 ± 1.8	93.3 ± 8.5
Control	68	26.4 ± 2.2	15.6 ± 1.1	24.8 ± 2.1	18.3 ± 1.6	85.1 ± 7.4
T value	-	4.1537	3.9582	3.0521	3.3161	7.9342
P value	-	0.0415	0.0396	0.0421	0.3059	0.0305

**Table 3.** Comparison of nursing satisfaction in two groups of patients.

Group	Case No.	Environment	Health	Psychology	Over satisfaction
Observation	68	62 (91.2%)	63 (92.6%)	65 (95.6%)	64 (94.1%)
Control	68	60 (88.2%)	62 (91.2%)	59 (86.8%)	61 (89.7%)
$\chi^2$ value	-	3.32	1.65	4.48	4.92
P value	-	0.0752	0.0461	0.0410	0.0426

## Discussion

In recent years, morbidity of brain tumor is increasing in our country, onset age is increasingly extensive, which happens at all ages and young and middle-aged adults are most common [16]. Brain tumor mainly includes primary brain tumor and secondary brain tumor, the incidence of male is slightly higher than women. With the increasingly mature of medical imaging technology and continuous development of neurosurgical technology in our country, operation of brain tumor is extensively carried out in primary hospitals [17]. However, patients with brain tumor face a risk of many complications in preoperative period, and there's possibility for cerebral haemorrhage and tumor recurrence after operation, therefore, scientific and reasonable care mode is of great importance.

Clinically, brain tumor mainly shows in the following three aspects: namely, increased intracranial pressure, such as emesis, optic disk oedema and headache; form of disease onset is slightly slow and course of disease ranges from 1~2 months to several years [18]. Focal symptoms, some of the common symptoms include sensory disturbance or dyskinesia, such as limb seizures, dysosmia, physical weakness, dysplasia, limb numbness and aphasia, etc. Brain tumor does a lot of harm to the patient's health, if not treated in time; it will seriously affect the patient's life quality as the disease progresses and endanger the patient's life once getting worse, which largely reduces quality of life of the patients [19]. Therefore, how to improve care effect of the patients with brain tumor in preoperative period has become one of important problems to be solved urgently at present.

Whole course high-quality care mode a mode being applied extensively, which assigns care task on the basis of division of responsibility, targets at the best feeling of the patients and makes efforts to ensure the improvement of life quality as well

as rapid recuperation of the patient [20]. In traditional care mode, nurses mainly complete their work, lacking communication with patients, thus, they cannot meet various needs of patients, causing care quality reduction and drop of responsibility [21]. Whole course high-quality care increases communication between nurses and patients, as well as humanistic concern, life guidance and discharge instruction. From admission to discharge of the patients, nurses ensure the improvement of nursing quality with an attitude of being responsible for patients from beginning to end [22].

Therefore, applying whole course high-quality care mode in neurosurgical patients with brain tumor in preoperative period will benefit for improving care quality and alleviating contradictions between doctors and patients. This care mode should be widely used in clinical treatment as an important content in medical unit reform.

## Acknowledgments

This research was sponsored by "Taizhou Scientific Research Project" (2015A33081).

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