

# To Explore the Mechanism, Clinical Effect and Nursing Effect of emergency Trauma Specialty

Zhang Long

School of Nursing Yanbian University, Jilin, Yanji, 133000, China

email: zhanglong@ybu.edu.cn

**Keywords:** Surgical Nursing in Emergency Department, Trauma Treatment, Application Effect

**Abstract:** To explore the effect of emergency nursing in the treatment of trauma, 108 patients with emergency operation trauma were divided into control group and observation group with double blind examination, 54 cases in each group. The control group received routine operation and the observation group received high-quality emergency operation. The incidence of complications in the observation group was 5.56% (3 / 54), significantly lower than that in the control group (18.52%). The effective difference is statistically valid. The nursing satisfaction of the observation group was 96.30%, which was significantly higher than that of the control group (81.48%). Conclusion: high quality surgical nursing in emergency department has obvious application effect and high safety, which can significantly reduce the incidence of complications and increase the risk of patients.

## 1. Introduction

Emergency surgery usually provides initial trauma assistance. The condition of emergency operation is serious and unstable. For example, stabbing and traumatic brain injury can put a patient in a coma. The patient's injury was serious. In order to ensure the quality of nursing staff, we need rich nursing experience and application technology, and the rehabilitation process of patients is significantly shortened [1]. In this study, in order to investigate the effect of emergency nursing in the treatment of trauma, as the research object, 108 emergency surgical trauma patients who were treated in our hospital from September 2015 to October 2017 were selected and divided into the control group and the observation group according to the double blind detection method. The control group received routine operation and the observation group received high-quality emergency operation. The nursing effect of the two groups was compared. The specific report is as follows.

## 2. Data and Methods

### 2.1. General Information

From September 2015 to October 2017, 108 cases of emergency surgical trauma were treated in our hospital [2]. According to the double blind method, the patients were divided into control group and observation group, 54 cases in each group. There were 27 males and 27 females in the control group, the youngest was 19 years old, the longest was 69 years old, the average age was  $45.18 \pm 18.86$  years old. The causes of injury included 32 automobile accidents, 18 falls and 4 others. In the observation group, there were 29 males and 25 females. The youngest was 20 years old and the oldest was 70 years old [3]. The average age was  $45 \pm 18.96$  years old. There were 30 car accidents, 19 falls and 19 falls. There was no significant difference in general information, such as gender, age, cause of injury.

Table 1 Comparison of treatment success rate and adverse events between the two groups

Group	Successful treatment	Adverse event
Observation group (n = 72)	69(95.83)	2(2.78)

Control group (n = 72)	57(79.17)	6(8.33)
$\chi^2$	11.265	16.124
P	<0.05	

## 2.2. Methods the Control Group Received Routine Operation

For example, follow the basic treatment steps after admission and combine with daily clinical management. The observation group received high-quality emergency surgery.

"If the wound is severe, traumatic shock is usually caused by a limb injury," the patient said. Therefore, patients in the hospital after treatment, to carefully observe their clinical symptoms and conditions, to avoid symptoms [4]. In addition, actively communicate with conscious people and at will, and effectively get the truth from their pantomime. For uncertain patients, please help their families to judge the patient's condition correctly and effectively, so as to provide good conditions for future treatment.

Table 2 Average treatment time and nursing satisfaction of the two groups

Group	Average treatment time (h)	Nursing satisfaction (points)
Observation group (n = 72)	39.12 ± 4.26	90.28 ± 4.26
Control group (n = 72)	64.25 ± 5.13	81.16 ± 5.42
t	5.319	5.232
P	< 0.05	

Almost all patients, easy to lead to hypoxic dyspnea this specific symptom, severe hypoxic disease, organ or tissue damage caused by it. Therefore, it is necessary to ensure that the patient's respiratory tract is not affected. The patient's blood and secretions in the mouth and nose are removed within time[5]. If simple aspiration is ineffective, it can be used to ensure that the patient's respiratory tract is not obstructed. The head of vomiting patients must be tilted to one side to avoid suffocation. People with breathing difficulties, their time to inhale oxygen or intuitively necessary. For people who fall behind their tongue, the pharyngeal airway is effective. deploy

It is necessary for patients to check their symptoms and signs as soon as possible, and pay close attention to their examination. Patients have symptoms of respiratory bleeding and shock, and observe whether their symptoms have necessary severity evaluation[6]. For diagnosis, please confirm the function of the patient's heart, breathing, abdomen, spine and limbs.

If the wound is exposed, carefully observe the change of the wound, carry out effective disinfection and pressurization to stop the bleeding. Patients who have their open skin removed and their aorta removed initially need pressure to stop bleeding.

Carefully observe the students and consciousness of patients. In case of any abnormality, targeted treatment should be carried out immediately[7]. Reduce the number of patients and avoid secondary injury. For trauma treatment, please take effective measures according to the actual injury situation of the patient. Remove secretions, blood and phlegm from the patient's mouth and nose. Give oxygen in time, open the trachea if necessary, and intubate to open the trachea. Quickly establish vein channels, give blood and fluid to maintain stable signs. At the same time, according to the wound site of the patient, careful inspection, disinfection, hemostasis with finger pressure, bandages with spices, triangular bandages, bandages and stretch bandages should be used to stop the bleeding. After the bandage treatment, fix the fracture with the fixed part, limit the movement of the injured part and confirm whether it is fixed[8]. Please refer to the previous emergency operation for risk prevention and management. Good event summary, analysis of causes, use of influencing factors, risk prevention and control strategies. In the process of emergency operation and nursing, risk assessment should be strengthened to find hidden dangers[9]. Correct and improve the defects in nursing work, reduce the risk of harmful events, and reduce the interference of emergency surgery. Doctor - to improve patient communication in front of patients with traumatic diseases and their families, emergency surgeons explain the status of patients in detail, introduce trauma treatment, effectively promote communication between doctors and patients, and be able to

understand each other. When carrying out the nursing business related to trauma treatment, the medical staff must communicate with the patients and their families in advance to obtain the support and assistance of the patients and their families. At the same time, actively encourage patients to actively treat, comfort patients, reduce the interference and injury of emotional factors on the recovery of the disease.

### **2.3. Statistical Method**

SPSS 21.0 was used for statistical analysis. The measured data were mean  $\pm$  standard deviation ( $\bar{x} \pm s$ ), and t-test was used.  $P < 0.05$  means the difference is statistically significant.

## **3. Result**

The incidence of complications was compared between the two groups. In the control group, 3 complications were found in 5.56% (3 / 54) and 10.5% (10 / 54) of the observation group. The incidence of complications in the observation group was significantly lower than that in the control group, and the difference was statistically significant ( $\chi^2 = 4.285$ ,  $P = 0.038 < 0.05$ ). Comparison of patients' satisfaction: the nursing satisfaction of the observation group was 96.30%, significantly higher than that of the control group

## **4. Discuss**

### **4.1. Trauma Treatment is Very Important in Emergency Operation**

Nurses play an important role in the hospital and in the preparatory hospital. Therefore, in order to carry out emergency surgical trauma treatment, it is necessary to put forward the following new requirements. during the treatment of severe trauma patients, in order to improve the quality of business, nursing staff should use the equipment in time for cardiopulmonary resuscitation. At this time, it is necessary for nurses to consider the actual situation of patients, fully grasp the nursing operation skills, and effectively use them. In addition, under special circumstances, if the patient does not cooperate or the light is insufficient, the nursing staff should have strong surgical ability and grasp the best rescue time to save the patient's life.

### **4.2. Enhance Physical Strength: Nurses Improve Work Intensity in the Process of Treating Trauma**

Therefore, nurses should strengthen their physical strength. To improve the psychological quality of patients with severe trauma, they often have unconscious flesh and blood, and may face death directly. It is for nurses to keep calm and actively carry out rescue activities with doctors to ensure the safety of patients' lives. In addition, nurses need to know about the use of new musical instruments and drugs to know about the use of new musical instruments and drugs. Timely and effective rescue can reduce the deterioration of patients' condition to a large extent. When patients are sent to other departments for treatment, the body can bear it well, and the signs of hypoxia and tissue damage caused by trauma are very light. After treatment, the disability rate of the body will be greatly reduced. It has a positive impact on improving the quality of life of patients; at the same time, it also strengthens the trust between medical staff and patients' families to a certain extent, and eases the relationship between doctors and patients in a certain range. The treatment and nursing of sudden trauma and general first-aid patients, because of sudden onset and major diseases, treatment needs to be carried out in the shortest time to save the life of patients and reduce the risk of disease. This is very strict because there are very strict requirements for emergency surgeon staff. In the medical service of emergency operation, we should focus on strengthening trauma treatment, properly treating trauma, avoiding further deterioration of injury and improving the success rate of first aid. Before treatment, it is necessary to treat the patients with sudden trauma and public first aid at the scene of trauma. The severity of the injury was evaluated and hemostasis, bandage and fixation of the injured part were performed. Through flexible and rapid transfer, strengthen risk prevention and control, effectively maintain the stability of patients' physical condition, and create

appropriate basic conditions for the follow-up treatment and nursing work of patients [5,6]. The application of trauma treatment in emergency surgery and nursing can effectively improve the success rate of disease treatment and reduce the risk of disease. At the same time, the quality and efficiency of emergency surgical services have been greatly improved, risk prevention and control as well as emergency response capacity have been strengthened, providing good protection for patients' health and safety.

## 5. Conclusion

The results of this research group show that the quality of control group is significantly improved in terms of control success rate, occurrence of harmful phenomena and treatment time in terms of condition monitoring, exercise, emergency treatment, risk prevention and management of observation group. And take full care of it. The value of trauma treatment in emergency operation and nursing was fully emphasized. In conclusion, high quality emergency treatment is effective and safe in the field of trauma treatment. It can effectively reduce the occurrence of complications and improve patients' satisfaction with nursing work.

## References

- [1] Morgan Schellenberg, Aaron Strumwasser, Daniel Grabo,. (2017). Delta Shock Index in the Emergency Department Predicts Mortality and Need for Blood Transfusion in Trauma Patients. *American Surgeon*, vol. 83, no. 10, pp. 1059-1062.
- [2] Wang J, Wu G, Yang R, et al. (2017). [Clinical application of cardiopulmonary resuscitation with abdominal lifting and compression in emergency treatment], vol. 29, no. 3, pp. 265-267.
- [3] Sage-Rockoff, Ada, Schubert, Finn D, Ciardiello, Amanda,. (2018). Improving Thermoregulation for Trauma Patients in the Emergency Department:, An Evidence-Based Practice Project. *J Trauma Nurs*, vol. 25.
- [4] Yuru Boon, Win Sen Kuan, Yiong Huak Chan,. (2019). Agreement between arterial and venous blood gases in trauma resuscitation in emergency department (AGREE). *European Journal of Trauma and Emergency Surgery*.
- [5] Robert C. Jacobs, Tinh T. Huynh, S. Elizabeth Ames,. (2018). Business Modeling of Orthopaedic Trauma in the Emergency Department: An Untapped Revenue Stream. *The Journal of the American Academy of Orthopaedic Surgeons*, vol. 27, no. 13, pp. 1.
- [6] Sandeep Sahu. (2017). What's new in Emergencies Trauma And Shock - Adequate Pain Management in the Emergency Department - A Dream Come True!. *Journal of Emergencies Trauma & Shock*, vol. 10, no. 4, pp. 167.
- [7] Schermann H, Kadar A, Dolkart O,. (2018). Repeated closed reduction attempts of distal radius fractures in the emergency department. *Archives of Orthopaedic & Trauma Surgery*, vol. 138, no. 4, pp. 591.
- [8] Xiao-Qin Ye, Operating Room. (2017). Application of fast-track surgical nursing care to laparoscopic surgery in patients with gynecological tumors: Nursing effects and impact on psychological fluctuations. *World Chinese Journal of Digestology*, vol. 25, no. 21, pp. 1976-1979.
- [9] Joseph, Anjali, Wingler, Deborah, Zamani, Zahra. (2017). Balancing the Human Touch with the Need for Integrating Technology in Ambulatory Surgical Environments: Barriers and Facilitators to Nursing Work and Care Team Interactions. *Journal of Interior Design*, vol. 42, no. 1, pp. 39-65.