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Emergency Nursing of a Case of Upper Gastrointestinal Bleeding Caused by Rupture of Esophagogastric Varices Caused by Foreign Body in Stomach

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Abstract

Emergency nursing of upper gastrointestinal bleeding caused by esophagogastric vein rupture caused by eating rough food was reported. The key to nursing is the timely identification of upper gastrointestinal bleeding and emergency treatment after bleeding. Psychological care and health education after first aid, and prevention of related complications. The rescue was successful in this case.

Keywords: foreign body, esophagogastric varices rupture, upper gastrointestinal bleeding, first aid, nursing

1. Introduction

Esophageal and gastric varices are one of the common complications of liver cirrhosis. In daily life, if you have improper diet or habits, it is easy to cause esophagus and gastric varices to rupture and cause upper gastrointestinal bleeding. Prevention, accurate identification and timely hemostasis of this disease are the keys. Patients often have a history of liver disease, some with an unclear history. Characteristic manifestations of upper gastrointestinal bleeding: hematemesis and melena. In this case, the patient ate biscuits in the morning of the onset of the disease, which caused the rupture of the esophagus and gastric varices and caused massive bleeding. After timely diagnosis, rescue and nursing, the patient was successfully treated. The current nursing report is as follows.

1.1 Case Data

The patient was male, 59 years old. He was admitted to the hospital because of "black stools for a day and intermittent hematemesis for 4 hours". 4 hours ago, she felt obvious nausea, and quickly vomited about 2000ml of dark red stomach contents, with blood clots, pale complexion and dizziness. Nausea relieved a little after vomiting. Half an hour later, he vomited about 400ml of dark red liquid. Feeling dizzy, flustered, fatigued, but unconscious. Call 120 for emergency and was admitted to the hospital on August 20, 2019, accompanied by a family member. In 2004, he was diagnosed as "liver cirrhosis" by B-ultrasound in another hospital, but he was not treated. There was no previous gastrointestinal bleeding, and no gastroscopy was performed. In recent years, he felt poor appetite, tired of greasy, fatigued, and bleeding gums may occur within 1-2 years.

2. First Aid Methods

Emergency evaluation of a patient after admission should begin with an assessment of the patient's consciousness, airway, breathing, and circulation. After the initial diagnosis and identification of acute upper gastrointestinal bleeding, the Glasgow-Bradchford Scale (GBS) was used to determine the degree of risk of the condition, (Emergency Physician Branch of Chinese Medical Doctor Association, Emergency Medicine Branch of Chinese Medical Association, Emergency Medicine Professional Committee of the Army, China Emergency Medical Association, Beijing Society of Emergency Medicine, 2021) and then the diagnosis was made. In this case, the patient vomited blood and melena, which were characteristic manifestations of upper gastrointestinal bleeding and were easy to diagnose. Oxygen inhalation (monitoring), monitoring (monitoring) and establishment of intravenous access (oxygen) (Emergency Physician Branch of Chinese Medical Doctor Association, Emergency Medicine Branch of Chinese Medical Association, Emergency Medicine Professional Committee of the Army, China Emergency Medical Association, Beijing Society of Emergency Medicine, 2021; Stanley, &

Laine, 2019) were carried out, and then three- lumen and two-bag tube compression was given to stop bleeding, fluid replacement and blood transfusion. Treatment measures such as infusion of octreotide acetate and oral thrombin were given. After the patient's circulation was stabilized, hepatoprotective treatment was given, no retention enema, and oral lactulose oral liquid was given into the stomach. After the patient's circulation was stabilized, emergency gastroscopy was performed. It was found that esophageal varices were visible at 25cm from the incisor teeth, and 35cm was obvious, and a spurting hemorrhage could be seen. Local 5% sodium cod liver oleate 30ml was injected into 3 parts around the bleeding to stop bleeding. Return to the ward to continue treatment after surgery.

3. Nursing

3.1 General Care

3.1.1 Postural Care

Place the patient in a supine position, with the head tilted to one side, clean up the blood in the mouth if necessary, keep the airway smooth, and prevent suffocation and aspiration. Elevate the lower limbs to ensure adequate blood supply to the brain. (Wei, Du, Wei, & Zheng) Pay attention to keeping the patient warm.

3.1.2 Monitoring

Quickly connect ECG monitoring to patients. And continuously monitor vital signs, blood pressure, electrocardiogram, blood oxygen saturation, etc. In patients with impaired consciousness or shock, a urinary catheter can be placed to record and observe the intake and output. (Emergency Physician Branch of Chinese Medical Doctor Association, Emergency Medicine Branch of Chinese Medical Association, Emergency Medicine Professional Committee of the Army, China Emergency Medical Association, Beijing Society of Emergency Medicine, 2021) Notify the doctor and report the medical history briefly and quickly.

3.1.3 Respiratory Care

The patient turns his head to one side when he vomits. Pay attention to observe and clean up the vomit in time, reduce malignant stimulation, and keep the sheets clean. For patients with disturbance of consciousness, respiratory or circulatory failure, attention should be paid to airway protection to prevent aspiration, oxygen inhalation or artificial ventilation support should be given if necessary, and resuscitation therapy should be started. (Emergency Physician Branch of Chinese Medical Doctor Association, Emergency Medicine Branch of Chinese Medical Association, Emergency Medicine Professional Committee of the Army, China Emergency Medical Association, Beijing Society of Emergency Medicine, 2021)

3.2 Cooperate With First Aid

3.2.1 Quickly Establish Venous Access

Severe bleeding patients should open at least two venous access (minimum 18G), if necessary, central venous catheter. (Emergency Physician Branch of Chinese Medical Doctor Association, Emergency Medicine Branch of Chinese Medical Association, Emergency Medicine Professional Committee of the Army, China Emergency Medical Association, Beijing Society of Emergency Medicine, 2021)

3.2.2 Rapid Venous Blood Collection

Blood samples were collected for blood routine, complete biochemical items, five items of hepatitis B + three items of antibodies, and cross-matching.

3.2.3 Prepare First Aid Supplies Quickly, First Aid Equipment and Rescue Medicines Should Be Ready Quickly

3.2.4 Rapidly Replenish Blood Volume

Quickly enter fluids or blood transfusions as prescribed by the doctor, maintain effective blood circulation, and enable the patient's organs to receive adequate blood supply. And to master the rules of infusion, first enter the crystal and then enter the colloid. It is not advisable to infuse a large amount of bank blood during blood transfusion, and fresh blood should be used as much as possible. At the same time, the infusion speed and infusion volume should be adjusted according to the changes of the patient's pulse, respiration, blood pressure, urine volume and hemoglobin.

3.3 Evaluation of Bleeding Volume

Studies have shown that if the bleeding volume of patients with upper gastrointestinal bleeding is more than 2000ml within 30 minutes, more than 50 % of the patients will die due to insufficient blood volume in a short period of time. Therefore, it is very important to quickly and accurately determine the amount of bleeding. It can

be judged by observing the color, character and quantity of vomit and feces. Bleeding 5-10ml, positive fecal occult blood test; bleeding > 60ml, tarry stools; gastric stasis of 250-300ml, vomiting blood; bleeding 500ml, dizziness; bleeding 800ml, thirst, oliguria, blood pressure drop; bleeding 1000-1500 ml, peripheral circulatory failure.

3.4 Nursing for Hemostasis by Compression of Three-Lumen and Two-Capsule Tubes

3.4.1 Before Catheter Placement

Before intubation, check the air bag for aging and air leakage. Use a syringe to inject 100ML-120ML of air into the esophageal sac and 150ML-200ML of air into the gastric sac. Check for air leakage. After the inspection is complete, exhaust the air injected into the esophageal pouch and gastric pouch for backup. The patient was conscious, explained the usage of the double-capsule triple-lumen tube to the patient, and obtained the patient's conscious cooperation.

3.4.2 Intubation

The measured length is 56cm. After lubricating the three- chamber two-pouch tube with paraffin oil, stand on the left side of the patient, slowly insert it through the nasal cavity, and use a syringe to draw out bright red blood. 200ml, slowly pull the three-lumen tube outward, press the gastric balloon to the fundus and cardia, and then inject 80-150ml of gas, clamp the three- lumen and two-capsule tube with a tube clamp, and pull with a heavy object to achieve hemostasis by compressing the gastric fundus.

3.4.3 After Intubation

Check the airbag pressure every 4-6 h, release the traction every 8-12 h for 30 min.

3.4.4 During Extubation

First, the gastric contents should be assessed, and the gastric contents should be extracted to observe whether there is blood; gastric occult blood within 12 hours should be assessed, and blood should be collected for routine blood monitoring; and the vital signs such as blood pressure and heart rate should be assessed. After the bleeding stops, relax the traction, release the gas in the sac, keep the tube for 24 hours, and consider extubation if there is no bleeding again. Before extubation, take 20-30ml of paraffin oil orally to lubricate the outer wall of the mucous membrane, namely the tube and the sac, exhaust the air in the sac as much as possible, and extubate the cannula with slow and gentle movements, so as not to damage the mucous membrane during extubation and cause re-injury and bleeding. During the extubation process, pay attention to observe the situation of gastric tube extraction. Observe the position of the bloodstain under the cyst wall, determine the bleeding site, assist in diagnosis and follow-up treatment. Remember to clean the oral and nasal cavities after extubation, and instruct the patient to spit out oropharyngeal secretions or expectorate sputum or remove the secretions with negative pressure in time. (Lu, Zhang, Ding, et al., 2011)

3.5 Medication Care

3.5.1 Somatostatin drugs should be administered alone, and should not be administered in combination with other drugs. Therefore, during the infusion process, a separate intravenous channel should be opened for continuous administration at a constant rate, and attention should be paid to controlling the infusion rate. The usage is the first dose of 250 micrograms by slow intravenous injection, followed by 250 micrograms intravenously every hour.

3.5.2 Octreotide acetate, when administered intravenously, firstly inject 0.1 mg intravenously (5 minutes), and then continuously intravenously infuse it through an infusion pump at a rate of 0.025-0.05 mg/h, with a course of treatment of up to 5 days.

3.5.3 Thrombin loses its activity within 8 hours at room temperature or within 48 hours after freezing when it is prepared into a solution, so it should be prepared and used immediately. When used for hemostasis in the digestive tract, dissolve it into a solution of 10-100 units/ml with normal saline or warm boiled water (not exceeding 37 degrees), orally or locally perfuse it. The concentration and frequency can also be increased or decreased according to the bleeding site and degree. This medicine must be in direct contact with the wound surface to stop bleeding. Do not inject subcutaneously or intramuscularly.

3.6 Gastroscope Care

3.6.1 Preoperative Care

3.6.1.1 Observe the patient's general condition and vital signs. Patients with hemorrhagic body weight or hepatic encephalopathy should be corrected before implementation.

3.6.1.2 Explain the purpose, method and precautions of hemostasis to the patient before surgery, relieve their concerns and obtain cooperation.

3.6.1.3 Routine fasting for 8 hours before surgery

3.6.1.4 Preoperative routine examination of blood routine and coagulation time. Prepare enough fresh blood for backup.

3.6.1.5 Establish venous access (use venous indwelling needle). For the first time to do sclerosant injection or variceal ligation, intravenous infusion of portal pressure-lowering drugs (such as somatostatin, etc.) can be used before and during the operation, and it can be used as appropriate in the future.

3.6.1.6 Half an hour before the operation, sedatives and antispasmodics such as diazepam and scopolamine bubromide should be given as appropriate according to the doctor's advice. The rest is the same as the preparation for gastroscopy.

3.6.2 Intraoperative Care

3.6.2.1 Place the patient in the normal operation position of the gastroscope and wear the tooth pad. The patient is placed in the left lateral position, the head is tilted back, a curved plate is placed on the side of the oral cavity, an anti-seepage pad is placed, and the oral secretions are cleaned in time.

3.6.2.2 Establish a sterile table: wash hands and disinfect, wear a mask, wear sterile gloves, lay out a large sheet for the patient, open the sterile dressing package on the treatment car, and protect it properly.

3.6.2.3 Maintain multiple venous channels, one for hemostasis and somatostatin drugs, one for rapid blood transfusion, and the other for volume expansion drugs.

3.6.2.4 After the gastroscope is inserted into the throat, instruct the patient to relax, cooperate with swallowing, and breathe through the mouth.

3.6.2.5 Actively cooperate with doctors. Nurses should be responsive and skilled. Pay attention to aseptic operation and prevent cross infection.

3.6.2.6 Intraoperative oxygen inhalation, ECG monitoring, to ensure the patency of the airway. Pay close attention to changes in blood pressure, pulse, respiration, consciousness and other discomforts, and rescue them in time if there is any abnormality. (Shang, X.-H.)

3.6.3 Postoperative Care

3.6.3.1 Fasting for 24 hours after the operation, and intravenous fluid rehydration as prescribed by the doctor, and then a liquid diet for 2 days.

3.6.3.2 Give antibiotics for 2 to 3 days as prescribed by the doctor, and take aluminum hydroxide gel for 3 consecutive days.

3.6.3.3 Closely observe the condition after operation, measure blood pressure and pulse regularly, observe whether there is hematemesis, blood in the stool, pay attention to the occurrence of complications such as delayed bleeding, ulcer, perforation, stenosis, and actively deal with them.

3.7 Psychological Care

A large amount of hematemesis will cause fear and despair in the patient. First aid personnel must win the trust of the patient with a calm and calm attitude, skillful and exquisite technology, and quick and accurate situation, so as to reduce their fear and establish the confidence to overcome the disease. When rescuing patients, keep the indoor environment quiet, with a smile on your face, not in a hurry, comfort the patient in a low voice, and eliminate their tension and fear; the nursing skills must be excellent, and the nursing operations must be skilled and orderly, so that the patient feels safe; Moderately play brisk and cheerful music in the ward, so that the patient is relaxed, distracted, and not overly focused on the disease; tell the patient some similar cases of successful rescue of the patient's disease, so as to enhance the patient's confidence in overcoming the disease, so as to actively cooperate with the treatment. Nursing staff can use the free time of nursing in the morning and evening to communicate with patients to understand the psychological state and needs of patients; provide different psychological nursing guidance for patients of different ages, occupations and cultural levels, and encourage patients and their fellow patients to be active. Communicate, don't have to think about it; let the patient really realize that negative emotions can seriously affect the recovery of the disease. Analyze various incentives that cause mood swings in patients, and try to eliminate them as much as possible; encourage patients to develop good eating habits, not overeating, not eating or eating spicy food, and maintaining an optimistic mood (Wang, 2011; Li)

3.8 Complication Care

Hepatic encephalopathy is one of the common complications in patients with upper gastrointestinal hemorrhage. The patient has ruptured esophagus and gastric varices, resulting in massive bleeding in the upper gastrointestinal tract, and the accumulation of blood in the intestinal tract for a long time induces hepatic encephalopathy. White vinegar solution can be poured into the anus to perform a small amount of non-retention enema. In order to inhibit bacterial decomposition of blood to produce ammonia to induce hepatic encephalopathy, antibiotics should be given as prescribed by a doctor. And combined with liver protection treatment, anti-shock. This can prevent the occurrence of hepatic encephalopathy.

3.9 Health Mission

3.9.1 Dietary Guidance

(1) Avoid spicy and irritating food such as pepper and garlic;

(2) Avoid drinking and smoking, alcohol can reduce gastric emptying ability and stimulate gastric acid secretion. Smoking can cause gastroduodenal mucosal vasoconstriction and reduce its defense ability;
(3) Fasting of foods with high fiber content, such as leeks and celery;

(4) Avoid eating rough, hard foods that are not easy to chew, such as fried jerky, hard dried fruits, etc.;

(5) Chew slowly when eating;

(6) Large tablets should be crushed and taken; 2. Avoid increased abdominal pressure.

3.9.2 Avoid Increased Abdominal Pressure

Elevated abdominal pressure can cause a rapid increase in portal venous pressure, further leading to rupture and bleeding of variceal veins in the esophagus. Therefore, all factors that are likely to lead to increased abdominal pressure should be discovered in time and actively eliminated. Such as coughing, forced defecation, full meal, vomiting, frequent hiccups, some drug stimulation, getting up too violently, excessive bending, etc. can lead to increased abdominal pressure and rapid increase of portal pressure.

3.9.3 Eliminate Negative Emotions and Carry Out Psychological Care

Emotional excitement can induce bleeding. For patients with negative emotions, it is necessary to patiently relieve the patient's negative emotions, help patients establish confidence in overcoming the disease, guide patients to learn self-regulation, and maintain a positive and optimistic mood.

3.9.4 Medication Guidance: Avoid Using Substances That Are Harmful to the Liver

3.9.5 Pay attention to Rest and Avoid Fatigue

3.9.6 Regular Review

If there are symptoms such as rapid pulse, palpitation, dizziness, upper abdominal discomfort, etc., go to the hospital in time.

4. Discussion

Ruptured esophagogastric varices are not the most common cause of upper gastrointestinal bleeding. But it can easily lead to massive bleeding. If the treatment or treatment is not timely and correct, it will lead to serious consequences or even death by shock. An excellent nurse should be a collaborator of the doctor rather than just the executor of the doctor's orders. Nurses have the most contact with patients and are often the first to discover changes in the patient's condition. Especially during the rescue process, they should not wait until the doctor gives the doctor's order to respond, but should respond quickly when encountering a crisis situation. Respond, prepare the necessary rescue items, medicines, etc. The doctor's order can be executed immediately when the doctor orders it. In this case, the patient received timely response and high attention from the medical staff immediately after admission. Do a good job in the identification of upper gastrointestinal bleeding and hemostasis emergency treatment after bleeding, as well as the prevention of complications and psychological care, health education. Avoid complications such as hepatic encephalopathy and infection. Guarantee the patient's life and health.

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