



Blood product transfusion & monitoring

Prepared by
Amal Ajlan

Purposes

- 1. To regain blood volume after surgery ,trauma , hemorrhage**
- 2. To regain the number of RBC in patient has chronic anemia**
- 3. To provide platelet for those with low platelet**
- 4. To provide clotting factors**
- 5. To replace plasma protein**

Policies

- ✓ **Obtain doctor's order and client or family member consent**
- ✓ **No blood should be transfused without proper typing, cross matching and screening except in life saving situation (O-ve blood can to be given)**
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- ✓ **Identify the patient before blood drawing for cross matching**
- ✓ **The doctor should countercheck and sign in the cross matching report .**
- ✓ **Blood received from blood bank should be started within 30 minutes if not, return to blood bank**

Policies

- ✓ **one nurse and one physician should verify the patient's identity prior to the administration of blood.**
- ✓ **Administration time should not exceed 4 hours because of the increase risk of bacterial proliferation.**
- ✓ **Vital signs should be taken and monitored every 5 minutes for the first 15 minutes then every 15 minutes for 30 minutes then hourly until the transfusion is finished**

Policies

- ✓ **Identification label from the blood bag should not be removed even after blood transfusion is complete.**
- ✓ **Blood components should not be mixed / primed with any solutions other than normal saline.**
- ✓ **Used blood bag with the tubing should be saved for a period of 24 hours after transfusion.**

Policies

- ✓ **If the patient is to receive more than 1 unit of blood, a new transfusion set should be used**
- ✓ **-Follow infection control measures**
- ✓ **For any transfusion reaction identified, immediately discontinue the transfusion. Inform the attending physician and fill-up an incident report**

PROCEDURES

- **Check the doctor's order and obtain client consent for blood transfusion.**
- **Correctly patient Identification.**
- **Assess the patient's condition.**
- **Explain to the patient/relatives the procedure.**
- **Wash hands, put on gloves.**
- **Prepare infusion site, select a large vein and cannulation.**
- **Remove gloves and wash hands.**
- **Obtain correct blood component for the client from blood bank.**

PROCEDURES

- **The blood component should be checked for the following:**
 - **Physician's order with the requisition.**
 - **Requisition form and the blood bag label with a laboratory technician.**
 - **Observe the blood for abnormal color, RBC clumping, gas bubbles, and extraneous material.**
 - **Return outdated or abnormal blood to the blood bank.**

PROCEDURES

- **With another nurse, compare the laboratory blood record with:**
 1. **The client's name and PIN.**
 2. **The number on the blood bag label.**
 3. **The ABO group on the blood bag label.**
- **Assessment and identification of the client.**
- **Set up the infusion equipment.**
- **Note adverse reactions, such as chilling, nausea, vomiting, skin rash, or tachycardia**

PROCEDURES

- **Document relevant data. Record:**
 1. **Starting the blood.**
 2. **Vital signs .**
 3. **Type of blood.**
 4. **Blood unit number and Sequence number .**
 5. **Blood reaction if occur.**
- **Save the used blood bag for 24 hours.**

Blood reaction

Policies

- 1. Only nurses competent in blood transfusion administration will be permitted to perform transfusions.**
- 2. The general practitioner who is responsible for the patient care should be available during procedure.**
- 3. Monitoring of vital signs and general condition of the patient during procedure.**

Policies

- 1. An emergency drug kit must be available in the departments and ready for use during the transfusion.**
- 2. Awareness of patient about the procedure and symptoms that is very important to tell us about it and took consent.**
- 3. Transfusion reactions must be reported promptly by nurse or physician on transfusion reaction form regardless of severity**

Types of reaction:

❖ Early:

- **Hemolytic reactions.**
- **Allergic reactions.**
- **Reactions caused by infected blood.**
- **Circulatory overload.**
- **Air embolism.**
- **Thrombophlebitis.**
- **Citrate toxicity.**
- **Hyperkalemia**

Types of reaction:

❖ Late

- **Transmission of disease (viruses, bacteria, and parasites).**
- **Transfusion iron overload.**
- **Immune sensitization**

Nursing intervention in blood reactions

- 1. Stop transfusion immediately .**
- 2. keep IV line open with a saline solution.**
- 3. Notify the physician.**
- 4. Monitor vital signs every 15 minutes.**
- 5. Send blood samples and collect urine sample for testing per doctor's order.**
- 6. Return blood bag and tubing to blood bank with Blood Returned Blood Bank Information Sheet.**
- 7. Administer medication per doctor's order.**
- 8. Fill-up the incident report.**



Thank you