PURPOSE:
To prevent life-threatening bleeding.

CONSIDERATIONS:
1. Platelet transfusions are indicated in the treatment of blood dyscrasias as well as for thrombocytopenia secondary to malignant diseases and to cancer therapy.
2. Since few red blood cells are transfused with platelets, cross-matching of platelets is not necessary, unless ordered.
3. Platelet transfusions should be administered as soon as possible upon receipt from the blood bank and infused as rapidly as tolerated by the patient, unless a set transfusion rate is ordered.
4. Platelet transfusions given to bone marrow transplant patients should be radiation-sterilized prior to transfusion.
5. Patients may be pre-medicated with diphenhydramine and/or acetaminophen prior to transfusion, if ordered.
   a. Oral medications should be given 30 minutes prior to transfusion.
   b. Intravenous (IV) medications should be given immediately prior to administering platelets.
6. Emergency medications or an anaphylaxis kit must be available. Most adverse reactions occur within the first 15 minutes.
7. The physician’s written order is to include:
   a. Type and amount of blood component.
   b. Date of transfusion.
   c. Pre- and post-transfusion blood work.
   d. Duration of infusion.
   e. Pre-medications.
   f. Emergency medications/procedures to be used in case of a transfusion reaction.
8. A caregiver able to assist the nurse in administering the transfusion and capable of observing the patient for adverse effects of transfusion must be present during and after the transfusion.
9. The physician must be readily available by phone and may be notified at the start and conclusion of a transfusion.
10. Use at least two patient identifiers prior to administering medications.
11. Per Joint Commission recommendations, all tubes and catheters should be labeled to prevent the possibility of tubing misconnections. Staff should emphasize to all patients the importance of contacting a clinical staff member for assistance when there is an identified need to disconnect or reconnect devices.

EQUIPMENT:
Gloves
Alcohol applicator (wipe/swab/disk/ampule)
100 mL bag normal saline (2)
Platelets (individual units or pooled)
21-gauge or larger 5/8 to 1-inch needle or needle less adaptor
Heparin solution (100 units/mL,or as prescribed)
3 mL, 5 mL or 10 mL syringe with needle (optional)
IV tubing with platelet filter
IV pole (optional)
Tape
Puncture-proof container
Impervious trash bag

[Note: Equipment received from blood bank may vary.]

PROCEDURE:
1. Contact the physician by telephone and verify transfusion orders, availability of physician in case of emergency and document a home transfusion record form.
2. Adhere to Standard Precautions.
3. Identify and explain the procedure and purpose to patient/caregiver, including possible adverse reactions to platelets:
   a. Elevated temperature.
   b. Shaking and chills.
   c. Urticaria.
4. Obtain patient's signature on informed consent for platelet transfusions.
5. Assemble equipment on a clean surface close to patient.
6. Check platelet label for patient's name, expiration date and platelet order.
7. Place patient in comfortable position, ensuring that site is accessible.
8. Ensure adequate lighting.
10. Attach sterile needle or needle less adaptor to end of administration set and tape connection, if needed.
11. Squeeze drip chamber of tubing, and prime tubing to remove air.
12. Clean injection port of central venous catheter line, peripheral IV line or subcutaneous catheter line with alcohol applicator. Allow to air dry.
13. Insert needle or needle less adaptor attached to administration set into injection port.
14. Establish patency of IV line by flushing with normal saline.
15. Take and record vital signs prior to platelet infusion. Notify physician if temperature elevated above 101 degrees Fahrenheit prior to proceeding with platelet administration.
16. Insert administration set into platelet bag. Open roller clamp to infuse platelets. Repeat insertion with each unit of platelets, unless pooled.

17. Administer platelets as tolerated or at prescribed rate, monitoring vital signs every 15 minutes.

18. Assess patient for adverse reactions throughout transfusion. If changes in vital signs or adverse reactions noted:
   a. Decrease infusion rate to keep vein open (KVO) or discontinue platelet transfusion and resume normal saline infusion.
   b. Administer medication as ordered for adverse reactions.
   c. Notify physician.

19. After completion or discontinuation of platelets, close roller clamp. Remove platelet bag from administration set, keeping spike of administration set sterile.

20. Insert administration set into a new normal saline bag, open roller clamp and flush line at KVO rate for 5 minutes.

21. Discontinue normal saline infusion. Close roller clamp and remove needle or needle less adaptor with attached tubing from injection port.

22. Flush venous access with heparin solution (appropriate for type of venous access) or remove peripheral IV accordingly. (See Intravenous Therapy Administration in the Home.)

23. Discard soiled supplies in appropriate containers.

24. Remove gloves, wash hands.

AFTER CARE:

1. Document in patient's record:
   a. Date, time, procedure and observations, including all vital signs.
   b. Medication administered dosage, time, route and rate.
   c. Blood component infused, volume, expiration date and identification numbers.
   d. Time infusion started and discontinued.
   e. Amount of normal saline used during transfusion.
   f. Heparin solution for flush, amount and strength.
   g. Type and appearance of venous access site.
   h. Patient's response to procedure, side effects and management.
   i. Instructions given to patient/caregiver.
   j. Communication with physician.