

Bullet Point Nursing

Nursing pharmacology – Blood administration

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Whole blood

- Contains all components including PRBC, platelets, and plasma

Packed Red Blood Cells (PRBC)

- Contains oxygen carrying abilities
- Indications: Anemia and blood loss
 - Often indicated based on hemoglobin and/or hematocrit
- Blood is always administered through specialized “Y” blood tubing
 - This contains a special in-line filter
- Is often warmed especially when administering in shock or large amounts
 - Is stored frozen and ready to use at refrigerated temperature
- Can only be infused with 0.9% sodium chloride
 - Uses designated Y connector tubing that includes an in-line filter
- Must be ABO compatible
 - Four blood types: A, B, AB, O
 - O is the universal donor
 - AB is the universal recipient
- Patients may need calcium infusion to address the citrate that the blood is stored in
- PRBCs are the most common culprit in acute hemolytic reactions
 - Symptoms are fever, chills, back or flank pain, hypotension, and more
- Reactions:
 - Most reactions will begin within the first 15 minutes
 - Fever is the most common adverse effect
 - RN must remain with the patient for the first 15 minutes of an infusion
 - Patient temperature should be checked prior to infusion and again at 15 minutes
 - Standard practice is for two professionals to verify any unit of blood prior to transfusion
 - Immediately stop infusion with any suspected reaction
 - Immediately reassess the patient beginning with ABCs
 - Do not discard the blood unit and tubing, preserve for follow up
 - Do not allow any more blood to infuse in (do not flush the line with blood in it)
 - Notify the provider

Platelets

- Essential in the patient that is bleeding and to prevent bleeding
- Indicated for actively bleeding patients and/or those with thrombocytopenia

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Fresh Frozen Plasma (FFP)

- Contains clotting factors
- Blood must be ABO identical or compatible
- Indicated for massive transfusion and clotting factor replacement
- Treatment success may be monitored through PT/aPTT

Blood consent often requires special informed consent

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References

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