

The Reading Hospital School of Health Sciences
Nursing Program
NRS 200 Acute Care/Complex Nursing
Critical Thinking: IV Label and Complications Worksheet

1. Fill in the answers to the chart below.

Complications	Signs
Local infection	Redness, swelling, and drainage at site.
Systemic Infection	Chills, _____ fever _____, malaise, headache, nausea, _____ vomiting _____, backache & _____ tachycardia _____.
Tissue damage	Skin color changes, sloughing of skin, discomfort at site.
Phlebitis	_____ Heat _____, redness, _____ tender _____ at site, _____ sluggish _____ infusion, but usually no _____ swelling _____ or _____ hardness _____ at site.
Thrombophlebitis	Heat, _____ redness _____, tenderness at site, sluggish infusion, _____ hard _____ or _____ cord-like _____ vein
Infiltration	Edema, pain, and coolness at site, with or without a blood return.
Catheter embolism	Decreased blood pressure, pain _____ along the vein _____, weak, _____ rapid _____ pulse, _____ cyanosis _____ of nail beds; loss of _____ consciousness _____.
Circulatory Overload	Increased _____ BP _____, distended _____ jugular veins _____, tachycardia, dyspnea, moist cough, _____ crackles _____.
Electrolyte overload	Ecchymosis; immediate swelling and leakage of blood at site after catheter insertion; _____ hard _____ painful lumps at insertion site.
Air embolism	_____ Tachycardia _____, _____ dyspnea _____, _____ cyanosis _____ decreased _____ level of consciousness _____.
Speed shock	Flushing, _____ chest tightness _____ or, _____ dizziness _____, other signs vary based on the medication.

****Use *Critical Thinking: IV Label and Complications Resource for Worksheet* to complete numbers 2-10.**

2. Match the pictures with the complications:
a. infiltration

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- b. phlebitis
- c. extravasation
3. What is the solution?
5% dextrose and 0.45% sodium chloride
- Is the solution hypotonic, hypertonic or isotonic? Hypertonic
- List 2 reasons this solution would be ordered. Hyponatremia, Cerebral edema
- How long will it take until the bag needs to be replaced? 24 hours
4. What is the solution? heparin
- What is the base solution? 0.9% NS
- If this medication is running at 8ml/hr, how much medication is the patient receiving per hour? 8ml
- List two reasons this medication might be ordered. To prevent clots and thin the blood.
- How long will it take until the bag needs to be replaced? 96 hours
5. What is this solution? Potassium chloride
- What is the base solution? 5% dextrose
- List 2 reasons this might be ordered. Potassium replacement, dehydration.

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If this is running at 80ml/hr, how much medication is the person receiving?

How long will it take until the bag needs to be replaced? 24 hours

6. What is the solution? Potassium chloride

What is the base solution? 5% dextrose and 0.225% sodium chloride

List 2 reasons this might be ordered. To increase fluid volume, dehydration.

If this is running at 42ml/hr, how much medication is the patient receiving? 42 ml/hr

How long will it take until the bag needs to be replaced? 24 hours

7. What is the solution? Dopamine Hcl

What is the base solution? 5% dextrose

List 2 reasons this might be ordered for a patient. MI, renal failure.

If this is running at 3ml/hr, how much medication is the patient receiving? 3ml/hr

How long will it take until the bag needs to be replaced? 24 hours

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8. What is the solution? 5% dextrose and 0.9% sodium chloride

Is it hypotonic, hypertonic, or isotonic? hypertonic

List 2 reasons this might be ordered for a patient.
Replace electrolytes. Dehydration.

If this is running at 125ml/hr, how long will it take until the bag needs to be replaced? 4 hours

9. What is the solution? Flucanazole

What is the base solution? Osmotic sodium chloride

If this medication is running at 100ml/hr, how much medication is the patient receiving per hour? 100ml

List two reasons this medication might be ordered. Fungal or yeast infections.

How long will it take until the bag needs to be replaced? 96 hours

10. What is the solution? Magnesium sulfate

What is the base solution? water

If this medication is running at 100ml/hr, how long will it take to infuse? 1 hour and 30 mins

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List two reasons this medication might be ordered. Magnesium replacement, and in conditions with pregnant women like pre-eclampsia.