QUESTIONS (SELECT ALL THAT APPLY)

1- When removing a central line device the nurse needs to first confirm and assess

A- MD orders, catheter size, x-ray location, coagulation status

B- MD orders, catheter size and length

C- MD orders, edema, if the INR & aPTT are high enough

D- MD orders, s/s thrombosis, that the catheter is 8 french or smaller and ensure that the PT/INR and PLT are low enough

2- When removing the CVAD why is it important to place the patient either in a laying down or Trendelenburg position?

A- This is a suggested position for all catheters including urinary catheters since it aids the RN in performing an accurate procedure.

B- It is easier for the patient to exhale in this position and the exhalation helps prevent air embolisms

C- If an air embolism develops then it will be able to quickly move to a higher turbulence area of the heart and break into smaller pieces causing less damage to the patient.

D- All of the above answers are correct for this question.

3- What areas are acceptable to place the tip of a CVAD?

A- Mid - Lower Superior Vena Cava

B- Upper Superior Vena Cava

C- Cavoatrio Junction

D- Right Atrium

4- All of the below are signs of catheter malposition except:

A- Bubbling or whooshing noise

B- Inability to aspirate blood

C- Inability to flush

D- Patient experiences pain when lying on their left side.

5- True or false:

A nurse must always obtain a blood return prior to flushing a CVAD?

6- Which lumen is typically used for blood? TPN?
A- The 16 gauge proximal lumen
B- The 18 gauge proximal lumen
C- The 16 gauge medial lumen
D- The 18 gauge medial lumen
E- The 16 gauge distal lumen
F- The 18 gauge distal lumen

7- R.J. is a 54-year-old African American male who is admitted to the hospital with a dx of infective endocarditis. R.J. will need IV access for extended antibiotic administration.

What type of IV access would be most appropriate for this patient?

(answer in your own words)

ANSWERS:

1- When removing a central line device the nurse needs to confirm:
NO A- x-ray location (this is for just for changing a CVAD dressing, not removing it).
*** B- MD orders, catheter size and length**
*** C- MD orders, edema, if the INR & aPTT are high enough**
NO D- Ensure that the PT/INR and PLT are low enough (the PT/INR, aPTT need to be within an appropriate range so the patient does not bleed out. If the PLT are too low then the patient will not clot and again be a bleeding risk.)

2- When removing the CVAD why is it important to place the patient either in a laying down or Trendelenburg position?
A- This is a suggested position for all catheters including urinary catheters since it aids the RN in performing an accurate procedure.
B- It is easier for the patient to exhale in this position and the exhalation helps prevent air embolisms
*** C- If an air embolism develops then it will be able to quickly move to a higher turbulence area of the heart and break into smaller pieces causing less damage to the patient and reduce the risk of developing a deadly air embolism that gets lodged in the lungs.**
D- All of the above answers are correct for this question.

3- What areas are acceptable to place the tip of a CVAD?

***A- Mid - Lower Superior Vena Cava**

B- Upper Superior Vena Cava NO, high r/f thrombosis

*** C- Cavoatrio Junction**

D- Right Atrium NO, high r/f dysrhythmias, pericardial perforation, tamponade

4- All of the below are signs of catheter malposition except:

A- Bubbling or whooshing noise

B- Inability to aspirate blood

C- Inability to flush

NOT A SIGN *** D- Patient experiences pain when lying on their left side.**

5- True or false:

TRUE - A nurse must always obtain a blood return prior to flushing a CVAD?

6- Which lumen is typically used for blood? TPN?

A- The 16 gauge proximal lumen

B- The 18 gauge proximal lumen

C- The 16 gauge medial lumen

*** D- The 18 gauge medial lumen = TPN**

*** E- The 16 gauge distal lumen = blood + remember that medications CAN NOT be given into a blood transfusion.**

F- The 18 gauge distal lumen

**** remember the lower the number = the bigger the opening***

7- A peripherally inserted central catheter (PICC) is most appropriate for extended IV antibiotic therapy. PICCs can be used with patients who need vascular access for 1-6 months but can be in place for longer periods. Advantages of the PICC over a CVAD are:

- Lower infection rate
- Fewer insertion related complications
- Decreased cost
- Insertion at the bedside or outpatient area.

OTHER NOTES FROM THIS UNIT:

- Remember to flush with 10 mL NS Q 4-8 hours & after each use.
- Use the **pulsate flush** technique (PUSH-PAUSE).
- Non-Groshong = the "regular" type that require clamping.
- **ALWAYS obtain a blood return before using.**
- Need to prime the injection ports with NS.
- Central line dressing change is a sterile procedure.
- With multi-lumen CVAD, blood samples should be obtained from the most proximal lumen if possible (this seems counter intuitive since the distal lumen is designated for blood transfusions)
- Do not use TPN line for blood draws.
- Flush CVAD with 10 mL NS (again using the push-pause technique).