

# Southern Illinois Regional EMS System

## B-24 CENTRAL LINES: CARE AND MAINTENANCE

### ALS Guidelines:

- ALS personnel (Paramedics) may transport a hemodynamically stable patient with a central venous access catheter, multi-lumen catheter or implanted vascular access device who requires continuous maintenance intravenous fluids and medications.
- The transferring hospital should ensure IV fluids are sufficient for the duration of the transport.
- Paramedic personnel are not responsible to mix and/or initiate IV drip medications or fluids. Monitor only.
- Fluids and medications per CVP lines shall be maintained on an infusion pump at a set rate for continuous infusion that does not require titration.
  - Refer to System Drug Policy for approved drugs for transport.
- Patient receiving continuous infusion per central line must be on a cardiac monitor.
- TPN, Hyperal or Blood solutions are not approved for transport via peripheral or central lines.
- No IV bolus or push medication shall be administered via central line unless the patient develops a life-threatening situation which requires immediate intervention.
  - Medical Control must be contacted.

### General Care and Maintenance:

- Care and maintenance of central multilumen catheters should be considered an aseptic procedure.
- Dressing changes are a sterile procedure and not the responsibility of the Paramedic.
  - In the event of leakage from the site, reinforce the dressing with sterile 4x4's.
- Scissors or sharp objects should not be used on or around the catheter or tubing.
- Access for signs of fluid infiltration: swelling in the shoulder, neck, chest and arm.
- Minimize patient activity.
- Document on the run report your assessment findings and intervention, if any, during transport.
  - Include type of fluids/medications, flow rate of infusion and development of any problems.

### Complications:

- Examine the site carefully (without removing the dressing) for infiltration: swelling in the shoulder, neck, chest and arm.
- If the patient complains of stinging, burning, or pain at the site:
  - Discontinue the infusion by clamping the tubing and turning the infusion pump off.
  - Do not remove the catheter.
- If the patient exhibits signs and symptoms of air embolism, pneumothorax / hemothorax:
  - Ex: chest pain, dyspnea, cyanosis, decreased breath sounds on affected side, respiratory distress, and decrease in pulse and blood pressure.
  - Check for opening, cutting or break in catheter.
  - Discontinue infusion by clamping tubing close to site and turning off infusion pump.
  - Divert to nearest hospital and contact Medical Control.

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## B-24 CENTRAL LINES: CARE AND MAINTENANCE (continued)

### Drug Administration:

- No IV bolus or push medication will be administered via central line unless the patient
- develops a life-threatening situation which requires immediate intervention.
  - Medical Control must be contacted.
- When using a multi-lumen CVP device for medication administration, do not use more than one lumen.

### Procedure:

- Check for blood return and flush with 10cc normal saline.
- Clamp the extension tubing and connect the empty syringe to the tubing.
- Release the clamp and aspirate slowly to verify blood return.
- Flush with 3-5 cc normal saline.
- Administer the drug and flush afterward with 3-5cc normal saline.
  - Flush with 10cc normal saline for incompatible drugs/fluids.