History
- Central venous catheter type:
  - Tunneled catheter (Broviac/Hickman)
  - PICC (peripherally inserted center catheter)
  - Implanted catheter (Mediport)
  - Fistulas
  - Occlusion of line
  - Complete or partial dislodgement
  - Complete or partial disruption

Signs and Symptoms
- External catheter dislodgement
- Complete catheter dislodgement
- Damaged catheter
- Bleeding at catheter/fistula site
- Erythema, warmth, or drainage about catheter/fistula site indicating infection

Differential
- Fever
- Hemorrhage
- Reactions from home nutrient or medication
- Respiratory distress
- Shock
- Internal bleeding
- Blood clot
- Air embolus

Airway, breathing, or circulation problem?
- Yes: Exit to appropriate TGs
- No

Damage to catheter?
- Yes: Clamp catheter proximal to disruption
- Stop infusion if ongoing
- No

Catheter completely or partially dislodged?
- Yes: Apply direct pressure around catheter
- Stop infusion if ongoing
- No

Hemorrhage at catheter site?
- Yes: Apply direct pressure around catheter
- No

Suspected air embolus, tachypnea, dyspnea, or chest pain?
- Yes: Place patient on left side in head down position
- Stop infusion if ongoing
- Clamp catheter proximal to disruption
- No

Ongoing infusion?
- Yes: Continue infusion
- Do not exceed 20 ml/kg
- No

Pearls
- Always talk to family/caregivers as they have specific knowledge and skills of device(s).
- If hemodynamically unstable and a peripheral IV or IO cannot be obtained, access central catheter and utilize for definitive care if device is functioning properly.
- Central venous access devices that require the penetration of skin, such as internal subcutaneous infusion ports or fistulas, may not be used.
- Use strict sterile techniques when accessing/manipulating an indwelling device.
- Do not place a tourniquet or BP cuff on the same side where a PICC line is located.
- Do not attempt to force catheter open if occlusion is evident.
- Some infusions may be detrimental to stop. Ask family or caregiver if it is appropriate to stop or change infusion.
- Hyperalimentation infusions (IV nutrition): If stopped for any reason, monitor patient for hypoglycemia.