Central Venous Catheters Assessment Algorithm

Dressing / IV tubings
- Intact
  - Biopatch with (blue side up).
  - Dressing is signed and dated
  - IV tubings are dated
  - Sterile end caps attached for intermittent IV tubings
  - External catheter consistent with initial insertion length (for PICCs)
  - Continue with drsg changes as scheduled and PRN

- Non-Intact
  - Change Drsg (date, time and initial)

Surrounding skin and patient’s arm
- Pain, Redness, Drainage
  - Arm Swelling/Edema
    - Yes
      - Arm swelling, neck edema on side of CVC/PICC
      - Obtain order for ultrasound to r/o DVT. Notify PICC Nurse for PICCs
      - Palpable venous cord, pain, erythema around catheter site, drainage from catheter site
      - Suspect CVC as possible source of infection or other complications:
        - Obtain order from physician to discontinue CVC
        - Gram Stain and culture of catheter exit site if drainage is present
        - Paired blood cultures (CVC and percutaneous samples) with catheter tip to rule out Catheter-Related Blood Stream infection (CRBSI)
        - Patient may be started on systemic antimicrobials
        - Obtain physician’s order for a CXR (1 view) to document catheter tip
        - Continue IV Therapy
    - No
      - Continue IV Therapy

- Patency
  - Able to withdraw brisk blood return (assess each lumen separately). Done once daily for Qday infusions

  - Yes
    - Patient reported hearing noise (swishing) while catheter is being flushed
      - Rule out possibility of drug or lipid precipitate (e.g. dilantin, rifampin, TPN)
    - No
      - Continue IV Therapy

  - No
    - Consider replacing CVC (obtain order from physician)
    - Treat each occluded lumen/port with Alteplase (Cathflo) per protocol (obtain order from physician)

Cathflo Activase is written: Cathflo 2 mg IV x 1 to each occluded port and may repeat x 1 after 2 hrs if 1st dose is ineffective.

Appendix B

- Biopatch with (blue side up).
- Dressing is signed and dated
- IV tubings are dated
- Sterile end caps attached for intermittent IV tubings
- External catheter consistent with initial insertion length (for PICCs)

- Change Drsg (date, time and initial)

- Continue with drsg changes as scheduled and PRN

- Arm swelling, neck edema on side of CVC/PICC
- Palpable venous cord, pain, erythema around catheter site, drainage from catheter site
- Suspect CVC as possible source of infection or other complications:
  - Obtain order from physician to discontinue CVC
  - Gram Stain and culture of catheter exit site if drainage is present
  - Paired blood cultures (CVC and percutaneous samples) with catheter tip to rule out Catheter-Related Blood Stream infection (CRBSI)
  - Patient may be started on systemic antimicrobials
  - Obtain physician’s order for a CXR (1 view) to document catheter tip
  - Continue IV Therapy