Central Venous Catheters Catheter Clearance Algorithm with rTPA (Alteplase)

Catheter occlusion as assessed by the inability to withdraw at least 3 mL of blood (assess each lumen separately)

Rule out other causes of catheter occlusion prior to treating catheter with rTPA (Alteplase)

Non-Thrombotic Occlusion

- Mechanical
  - Common causes are:
    - visible catheter kink
    - dressing or sutures too tight
    - catheter pinch-off
    - catheter tip malposition
    - malfunctioning IV connector (change caps and then reassess). Also hand tighten caps to prevent airleaks.

- Drug Precipitation
  - Common causes are:
    - Dilantin IV
    - Rifampin IV
    - Lipids
    - Drug incompatibilities
    - Inadequate flushing volume
    - Inappropriate flushing technique

Thrombotic Occlusion

- Partial Occlusion
  - May be sluggish upon flushing and aspiration

- Complete Occlusion
  - Unable to infuse any solution
  - Treat with Cathflo Activase
    - Obtain physician’s order
    - Order written as: Cathflo 2mg IV X1 to each occluded port and may repeat X1 after 2 hrs if 1st dose is ineffective.
    - If catheter remains occluded after 2 serial doses each lumen, further catheter management strategy should be discussed with physician

Dosing guidelines based on manufacturer recommendations. Does not substitute for individual physician’s orders.

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