

Standard Operating Procedure to ensure patency of Central venous access devices (CVAD/ CVC) – Royal Infirmary Edinburgh, Department of Critical Care.

Optimal line care

- Check patency of all CVC lumens every 24 hours – unless in use with continuous infusions eg TPN / vasopressors.
- Daily check of line patency to occur at start of every night shift and documented on front of 24 hour chart.
- Avoid using central venous access device for routine blood samples
- Aspirate 5mls of blood into **10ml luer lock syringe** and discard
- Flush with 10mls 0.9%NaCl using 10 or 20ml luer lock syringe (do not use smaller syringes)
- There are 2 techniques that should be used when flushing the lumens
  - Push Pause – injecting 1ml of saline at a time
  - Positive pressure technique - the flush procedure should be finished by maintaining pressure on the plunger of the syringe until the tap or clamp has been turned off to the patient.
- Following discontinuation of infusions the giving set should be immediately disconnected and the line aspirated and flushed as described above and the slider clamp applied. – Exception – vasopressors and inotropes (see below)
- Vasopressors and inotropes – Following discontinuation the giving set should remain attached to the CVC lumen for a **maximum of one hour** with tap off to infusion line and CVC lumen clamped. After disconnection aspirate and flush in the manner described above.

What to do if you encounter a lumen on a central venous access device that you cannot aspirate

- Ensure all clamps / taps are open
- Attempt to reposition patient eg. return to supine / move to lateral position / gentle traction of arm / repositioning of head / Tilt bed to head down position
- Inform nurse in charge of Base and seek appropriate assistance to determine if this is a totally occluded line and therefore needs to be removed or a line that cannot be aspirated but can be flushed and therefore can be used following appropriate review.
- The Nurse in charge of base will discuss with senior medical staff (reg or consultant) / ACCP who will make attempts to flush the lumen if safe to do so.
- A line / lumen **which can be flushed easily should be considered safe to use** and not an indication for line removal, reluctance to use this lumen or DATIX.

**Do NOT**

- Flush lines with syringes less than 10mls
- Hep lock lines
- Use thrombolytics to “strip” lines.

Authors: S/N J Park, S/N K Fitzsimmons, C/N L Bell, CNM S Gossner, Dr G McNeill, Dr A Gibson.

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