Bladder Irrigation

Introduction:

- **Catheter Encrustation**: Encrustation developing around the urinary catheter is related to an increase in urinary pH (.7). This increase in pH causes precipitation of calcium and magnesium phosphates that collect around the catheter producing a crust-like substance, which may lead to blockage.

- **Prevention of Encrustation**: Catheter encrustation and blockage is a common problem in long-term (>1 month) catheterized patients. Current management is to either replace the catheter before blockage occurs, or to irrigate on a routine basis. Although encrustation cannot be predicted, taking preventive steps is fundamental in good catheter care.

- **Increase Fluids**: Inadequate hydration is linked to catheter complications. Increasing your fluid intake could delay the onset of encrustation and decrease your risk of blockage. Certain types of carbonated drinks may increase urinary pH and should be limited. Drinking water, however, will help maintain the proper acidic urinary pH (5-6.5) and decrease encrustation complications.

- **Irrigation**: When water alone seems unsuccessful, studies show that instilling an acidic irrigation solution into the bladder via the catheter can help prevent or dissolve encrustations. Acetic acid ¼% is the most inexpensive way to irrigate your bladder if encrustation develops, or if your doctor has recommended the procedures.

What is urinary catheter irrigation?

Irrigation is a procedure to open a plugged urinary catheter. Tap water is inserted into the catheter to remove the plug, so that the urine can drain from the bladder.

How is the irrigation done?

1. Wash your hands with soap and water for at least 15 seconds, rubbing all surfaces briskly, or use an alcohol hand sanitizer.
   - Gather equipment
   - Baby wipes or wipes
   - 60 ml catheter tip syringes (2)
   - clean towel
   - connection cover for drainage tubing
   - Tap water
2. Open a sterile catheter tip syringe package. Keep the tip sterile--**do not** let it touch anything.
3. Draw up a syringe full of tap water.
4. Place syringe of tap water back into packaging to keep the tip sterile.
5. Place a towel under the catheter.
6. Using a wipe, clean the connection site between the catheter and the drainage tubing. Let it dry. Do not fan or blow on it.
7. With a gentle twist, disconnect the catheter from the drainage tubing. Cover the end of the tubing with a connection cover to keep it clean.
8. Insert an empty syringe into the catheter. Gently pull back on the plunger to see if any urine is in the bladder.
9. If urine comes out, use the syringe to gently empty the bladder.
10. Remove the syringe from the catheter.
11. Insert the syringe of tap water into the catheter.
12. Gently push on the plunger of the syringe to slowly push the tap water into the catheter. Do **not force the tap water into the catheter.**

13. If the tap water does not flow easily into the catheter, gently pull back on the plunger with one hand while holding the syringe steady with the other to aspirate (withdraw) fluid, using very little force. If you are unable to aspirate or irrigate the catheter, call the doctor.

14. After inserting the tap water into the catheter, try to draw the tap water back out.

15. Clean the connection site between the syringe and the catheter with a fresh wipe. Let it dry. Do not fan or blow on it.

16. Remove the cap from the drainage tubing. Scrub the tip of the tubing with a fresh wipe. Let it dry. Urinary catheter irrigation

17. Remove the syringe from the catheter and insert the connecting tubing.

18. Check the tubing after reconnecting to see if urine is flowing out of the catheter. If no urine is flowing after 10 to 15 minutes, repeat the irrigation process. If there is still no urine coming out, call the doctor.

19. Wash your hands again.

**What else do I need to know?**

To clean the catheter tip syringe:

1. Mix two solutions:
   - Dish soap and water
   - Solution of 1 part liquid bleach to 50 parts water (1 teaspoon liquid bleach to 1 cup water).
     Use pure, fragrance-free, additive-free bleach, Clorox®. Do not use other products.

2. Take apart the syringe.
3. Rinse the syringe parts and connection cover with water.
4. Wash the parts in soapy water.
5. Rinse with water to remove the soap.
6. Soak in bleach solution for 30 minutes.
7. Rinse well with water.
8. Air dry on a clean towel. Change the towel every day.
9. If you cannot get the syringe clean, throw it away and use a new one.

**When should I call the doctor?**

- the flow of urine stops, your child has been drinking enough fluids, and you have irrigated the catheter
- you are unable to irrigate the catheter

**Questions?**

Instructions for catheter irrigation are specifically for patients of the undersigned provider. If complications persist, please give the office a call at **614 293 8155**