



National Council of & for
Persons with Disabilities

Colloidal Silver – Tips & Information Supplied By The National Council of and for Persons with Disabilities (NCPD)

1. Colloidal Silver is made through a process of electrolysis which creates a solution with a small percentage of silver. Research has shown that organisms like e-coli can survive for hours on stainless steel, whereas if placed on a silver surface, they are killed in less than half-an-hour. Colloidal Silver is available at many pharmacies in both a liquid and gel and is not very expensive.
2. Colloidal liquid is sprayed around the catheter "wound" two or three times a day.
3. Bardex Catheters which are manufactured using Colloidal Silver impregnated into the catheter but they are expensive. (We have now dispensed with them as they are not transparent and one cannot see if the tube is blocked with matter.)
4. Concurrent with this we embarked on a rigorous sterile regime of hand washing etc for anyone touching the catheter tube etc.
Emptying the bag means using gloves - it is worth noting that gloves in themselves are not sterile, particularly when one is placed on a hand and the other non-sterile hand is used to apply the other glove!! After putting on gloves, a sterile hand wash is used to complete the sterile process before draining the urine bag. It is important to use a fresh tissue to clear up any drops at the bag tap - using toilet paper from the lavatory is not a good idea - it can be contaminated from the toilet flushing!! The urine receptical should have a cap and be washed under a tap before and after draining the bag. Gloves, of course, are used only once and then discarded.
5. Drinking lots of water is fundamental to preventing UTIs but this does not stop oxylate crystals forming in the bladder which can cause a catheter blockage - a quite traumatic event. Whilst it might appear that the bag is filling, it sometimes occurs that the crystals partially block the catheter, impeding the flow and causing the bladder to fill whilst still draining slowly into the bag - a case of "more in than out". This causes sweating and often a rise in blood pressure and if left unattended can cause autonomic dysreflexia. The quickest way to clear a blocked catheter is to flush the bladder. We use a 50ml large disposable syringe with a centre needle point. No needle is used. We then mix saline solution with about 25% Colloidal silver in a sterile container - a mug filled with water and boiled in the microwave does the job. Then it's gloves on as above, and then a sterile forceps clamp on the catheter tube so the bag can be disconnected. The syringe is then joined to the catheter tube, the forceps released and the saline/colloidal mixture slowly injected into the bladder. If

there is a serious blockage it may not be possible to inject the liquid and this is felt as strong resistance to pressing on the syringe plunger. (One can try a gentle pulling back or forth but if this does not work, then the catheter must be changed with urgency.) Generally though, the full 50ml is injected into the bladder - it is ok to use less if the patient starts sweating or is uncomfortable. After about a minute the liquid can be withdrawn. Often you will see floating matter in the syringe which is normal for having an in-dwelling catheter. If there is a lot - more than a quarter of a teaspoon - the process can be repeated. The bag can then be re-connected and carefully monitored to ensure free-flow. If the bag pipe has matter collecting on the side walls this can be flushed using vinegar before being re-attached. After this the "wound" is sprayed with colloidal silver.

NOTE - all forceps and plastic catheter plugs are washed in water-based Hibitane before and after use. (Do not let Hibitane get in contact with the wound)

6. Carers are required to use a sterile hand wash before touching the patient. Cell phones are most unhygienic and should not be taken into toilets.
7. Bathing – Some persons with Mobility Impairments still enjoy a bath, the warm water is very therapeutic, but baths can also be a source of infection for the open catheter wound. If this applies to you, you can try the following - a small handful of coarse salt is added to the water and a capful of Dettol. Use Head and Shoulders instead of soap as it has high ant-bacterial properties and is gentler on the skin than soap.
8. The colour of the urine is monitored every time the bag is emptied. It should be light straw coloured although it will often darken a little after strenuous physio. If it remains dark and starts to get darker with a strong odour there might be an infection. This will normally be accompanied by a rise in temperature. It is worth then also measuring and recording the blood pressure and heart rate. You will find that when the blood pressure rises - quads normally have a lower BP - the heart rate will drop and vice versa. Anything over 130 may signify the onset of dysreflexia (you should have Nephedipine capsules in case of this - normally 5mg popped into the mouth will lower the BP).

If it is a UTI - normally confirmed by a urine sample checked by a lab - the doctor will probably prescribe antibiotics.

Ongoing UTIs can mean regular use of antibiotics which can create resistance which in turn can cause a few problems, as antibiotics may no longer work when you urgently need them, which is why a strict sterile regime - it is worth almost anything not to get a UTI!

You can also ask your doctor about using a broad spectrum antibiotic call Gentimicin This is not injected or taken orally. We have had success mixing it into a saline solution and injecting it directly into the bladder. This I am told helps prevent a resistant situation. (You may talk to Dr, Terry at the Muelmed Hospital in Pretoria about this.)

It goes without saying that changing the catheter must follow all of the above -

especially changing clothes after the old catheter has been removed. (It is worth inspecting the in dwelling part of the catheter for crystals etc.)

9. Lastly bowel movements can be the cause of infection, especially when a patient has an unexpected "tummy". The cleanup has to be rigorous ensuring no fecal matter is left behind on the body or clothing. Again Colloidal Silver spray can be used after the soap and water cleaning process and then clean linen applied.

Might all seem intimidating but once you get the fundamentals of "being sterile" in place it will become routine!!