## **Ethanol Lock Therapy**

## **BACKGROUND:**

Ethanol lock therapy helps prevent IV line infections.<sup>1–3</sup> The best way to treat IV line infections is to give antibiotics and remove the IV line. However, not everyone can have their IV lines removed. In some of these cases, ethanol lock therapy can help prevent future infections.

If you cannot take alcohol or ethanol, or religious or cultural reasons keep you from using ethanol, discuss this with your doctor.

Ethanol lock therapy cannot be used with all IV lines. Tell your doctor what brand of catheter you have.

Do not inject the ethanol through the IV line. This may make you feel intoxicated (drunk). Ethanol lock therapy may make you feel ill if you use it while taking certain medications. Tell your doctor about all your medications.

## Procedure:⁴:

**Do not inject the ethanol!** Always remove the ethanol before using the IV line for other infusions! If you cannot withdraw the ethanol, contact your nurse.

The ethanol should stay in your IV line until the next time you need to use the IV line, or for up to 48 hours.

The ethanol lock solution should be used in each side of the IV line.

Use 10ml of ethanol in each side of the IV line.

- 1. Remove the old ethanol lock solution from the IV line. With an empty syringe, pull 10ml of fluid from the IV line. Throw this away.
- 2. Flush the IV line with saline.
- 3. If you are using the IV line for another medication, infuse the medication based on the instructions.
- 4. Flush the IV line with saline.
- 5. Place 10ml of the ethanol lock solution into the IV line.
- 6. Repeat these steps on the other side of the IV line.
- 7. Repeat these steps every 48 hours or each time you use the IV line.





## References

- 1. Dannenberg C, Bierbach U, Rothe A, Beer J, Körholz D. Ethanol-lock technique in the treatment of bloodstream infections in pediatric oncology patients with broviac catheter. *J Pediatr Hematol Oncol*. 2003;25(8):616-621.
- 2. Maiefski M, Rupp ME, Hermsen ED. Ethanol lock technique: review of the literature. *Infect Control Hosp Epidemiol*. 2009;30(11):1096-1108.
- 3. Onland W, Shin CE, Fustar S, Rushing T, Wong WY. Ethanol-lock technique for persistent bacteremia of long-term intravascular devices in pediatric patients. *Arch Pediatr Adolesc Med.* 2006;160(10):1049-1053.
- 4. Justo JA, Bookstaver PB. Antibiotic lock therapy: Review of technique and logistical challenges. *Infect Drug Resist.* 2014;7:343-363.



