

Bicarbonate Lock Therapy

BACKGROUND:

Bicarbonate lock therapy can help prevent IV-line infections.¹ The best way to treat IV-line infections is to give antibiotics and remove the IV. However, not everyone can have their IV lines removed. In some cases, bicarbonate lock therapy can help prevent future infections.

If you cannot take bicarbonate, please discuss this with your doctor.

Do not inject the bicarbonate through the IV line. Just let it sit in the IV line, killing the germs.

Procedure:

Do not inject or flush the bicarbonate! Always remove the bicarbonate lock solution before using the IV line! If you cannot remove the bicarbonate, call your nurse.

- Bicarbonate should stay in your IV line until the next time you need to use the IV line, or for up to 48 hours.
- The bicarbonate should be used on **each side** of the IV line.
- Put 3ml of bicarbonate into each side of the IV line.

Steps:²

1. Remove the old bicarbonate lock. Throw this away.
2. Flush the IV line with saline.
3. If you are using the IV line for medications, inject the medication based on the instructions.
4. Flush the IV line with saline.
5. Place 3ml of the bicarbonate lock into the IV line.
6. Repeat these steps with the other side of the IV line.
7. Repeat these steps each time you use the IV line, or every 48 hours.

Reference

1. Josyabhatla R, Naik M, Liu Y, Speer AL, Imseis EM. Sodium Bicarbonate Locks May Be a Safe and Effective Alternative in Pediatric Intestinal Failure: A Pilot Study. *J Pediatr Gastroenterol Nutr.* 2022;75(3):304-307. doi:10.1097/MPG.0000000000003506
2. Justo JA, Bookstaver PB. Antibiotic lock therapy: Review of technique and logistical challenges. *Infect Drug Resist.* 2014;7:343-363. doi:10.2147/IDR.S51388