

Ethanol Lock Policy

PURPOSE

To disinfect long-term vascular access device intraluminally for preservation of the device in patients with repeated infections.

POLICY

1. Ethanol lock is ordered by an authorized prescriber.
2. An appropriate physician order will be obtained.
3. The ethanol lock solution is instilled by a nurse with demonstrated competency in central line care.
4. Appropriate candidates for ethanol locks include patients:
 - a. That are six months and older
 - b. With persistent or frequent vascular access device infections
 - c. With negative history of allergy to ethanol
5. Until further research is available, ethanol locks should not be used as routine flushes. The ethanol lock should be instilled, left for a specified amount of time, then removed, followed by a routine flush solution (ethanol is not compatible with heparin). At this time, the recommended concentration of ethanol is at least 70% to maximize antimicrobial activity.
6. If the patient has multiple lumens, all lumens should be treated with ethanol.
7. Ethanol lock must be instilled in a patient catheter. If there is difficulty in flushing or withdrawing from the catheter, use a catheter clearance solution (Cath-Flo[®]) per manufacturer's recommendations and as outlined in the Management of Catheter Occlusion policy and procedure.
8. The volume of the ethanol solution should be the approximate volume of the catheter. Usually 1.4ml is a sufficient volume to fill the catheter.
9. The ethanol lock solution shall be prepared in the pharmacy.

EQUIPMENT

Liquid soap

Alcohol swabs

10ml syringe with prepared ethanol solution (70%)

Swab Cap

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1 Empty 10ml syringe

Saline flushes

PROCEDURE

1. Obtain physician order. Explain procedure to patient.
2. Wash hands thoroughly with soap and water. Dry with clean paper towel.
3. Assemble supplies on a clean surface.
4. Clean injection cap with alcohol wipes, using friction for a minimum of 15 seconds, and optimally for 60 seconds. Allow alcohol to dry.
5. Flush catheter with saline to assure patency. If you meet resistance, do not use excessive force. Resistance could mean an occluded catheter.
6. Attach the ethanol syringe and instill the ethanol into the catheter. Clamp the catheter and let it remain for a minimum of 2 hours and a maximum of 24 hours.
7. Withdraw ethanol and flush with a saline flush. Follow with a heparin flush, if applicable. Attach new Swab Cap when flushing completed.
8. Document procedure and results in the patient's medical record.

RESPONSIBILITY

The Clinical Specialist has the responsibility for approval of, compliance with, and revisions to this policy.

MODIFICATION/REVISION

This policy is subject to modification or revision in part or its entirety to reflect changes in conditions subsequent to the effective date of this policy.

REFERENCES

1. Infusion Nursing Standards of Practice – Revised 2016; Journal of Infusion Nursing, Supplement to January/February 2016, Volume 39, Number 1S.
2. Infusion Nursing: An Evidence-Based Approach, Third Edition edited by Mary Alexander, Ann Corrigan, Lisa Gorski, Judy Hankins, and Roxanne Perucca.
3. INS (Infusion Nurses Society) Policies and Procedures for Infusion Nursing, 3rd Edition.