

Health Facts for you

Nebulized Lidocaine

Your doctor has ordered a nebulized lidocaine treatment. Lidocaine is a medicine that numbs the throat and airways to briefly stop coughing. Do this treatment _____ times a day, or as needed.

You should not eat or drink for one hour after the nebulizer treatment, to prevent inhaling food or liquid from a numb airway.

Nebulized lidocaine is not prescribed for home use in children under 8 years old.

The Nebulizer

A small volume nebulizer (neb-U-lie-zer) is a device that holds liquid medicine. The medicine is turned into a fine mist by a small air compressor. The mist of medicine is deeply inhaled into the airways and lungs. A treatment of one dose will take about 10 to 20 minutes to finish.



The Equipment

You will need the items listed below to do a small nebulizer treatment of lidocaine solution.

- An air compressor
- A small volume nebulizer kit
- Syringes, dispensing pins, and alcohol wipes

The Treatment

- Wash your hands well with soap and water
- 2. Plug in the air compressor. Make sure it is sitting on a hard surface such as a table. Connect the long smooth tubing to the compressor outlet. Be sure to follow the directions on how to either clean or change the compressor filter.
- 3. Before you draw up the medicine, wipe the top of the lidocaine bottle with alcohol. Insert the dispensing pin through the top of the vial to remove fluid from the vial. Then, remove the medicine by screwing the syringe onto the dispensing pin.

 Draw out 3 mL of lidocaine and place it in the nebulizer cup. The pin can then be capped and can remain in the vial until the vial is empty.
- 4. Place the mouthpiece and extension tubing on the T-piece. Connect the T-piece onto the nebulizer. If using a mask, place the mask right on the nebulizer cup. Attach smooth tubing from the compressor to the nebulizer and turn on the compressor.
- 5. You should see a fine mist. If not, make sure the compressor is working. You can disconnect the smooth tubing. Feel for air coming from the compressor. If the compressor is working, check all connections. If the nebulizer is still not misting, use a different nebulizer kit.
- 6. Place the mouthpiece in your mouth or place the mask over the face.
- 7. Take slow deep breaths through the mouth. Hold your breath briefly on

- each inhale (breathing in). Exhale (breathe out) slowly.
- 8. Make sure the medicine cup is kept upright.
- 9. Stop the treatment and call your doctor right away if you notice any side effects or reactions to the medicine. Side effects include:
 - Trouble breathing
 - Racing heart
 - Nausea or vomiting
- 10. Do the treatment until the medicine is finished (no mist comes out). If the medicine sticks to the sides of the cup, gently tap the sides of the cup.
- 11. After the treatment is over take the medicine cup apart, rinse in hot water, and allow it to air dry on a clean towel.

How do I clean and disinfect my nebulizer?

The nebulizer must be cleaned and disinfected **twice a week** to destroy germs. You must clean and disinfect your lidocaine nebulizer by hand or by heat method in order to prevent infection and keep it working well.

How do I clean and disinfect by hand?

To clean and disinfect by hand, you can use either vinegar and water method or rubbing alcohol method. If you have cystic fibrosis (CF) do not use the vinegar and water method.

Vinegar and Water Method

- 1. Take the nebulizer apart. Wash the pieces in warm soapy water.
- 2. Rinse with hot tap water.
- 3. Place the pieces in a bowl and add enough vinegar and water to cover the parts. Make the mixture of 1 part white vinegar (5% solution from your grocery store) to 2 parts water (1 cup vinegar to 2 cups water).

- 4. Soak the pieces for 30 minutes to 2 hours.
- 5. Rinse all of the pieces with **sterile** water. Do not use water from the faucet, bottled, or distilled water. You can make water sterile by boiling it for 5 minutes. Use this water once, and then throw it out.
- 6. Place the pieces on a paper towel to dry.

Rubbing Alcohol Method

- 1. Take the nebulizer apart. Wash the pieces in warm soapy water.
- 2. Rinse with hot tap water.
- 3. Place the pieces in a bowl and add enough rubbing alcohol (isopropyl alcohol) to cover the pieces.
- 4. Soak the pieces for 5 minutes.
- 5. Rinse the pieces with **sterile water**. Do not use water from the faucet, bottled, or distilled water. You can make water sterile by boiling it for 5 minutes. Use this water once, and then throw it out.
- 6. Place the pieces on a paper towel to dry.

How do I clean and disinfect by heat?

Use the heat methods only for sturdy, hard plastic nebulizer cups. Heat cleaning may melt lighter, clear plastic nebulizers.

How do I clean and disinfect in the dishwasher?

- 1. Take the nebulizer apart.
- 2. Place the pieces in a dishwasher basket on the top rack. After the wash cycle is done, remove the pieces and shake out the extra water.
- 3. Air-dry the pieces on a paper towel.

How do I clean and disinfect in the microwave?

- 1. Take the nebulizer apart. Wash the pieces in warm soapy water.
- 2. Rinse with hot water.
- 3. Place the pieces in a bowl. Add enough water to cover the pieces.
- 4. Microwave for 3-5 minutes; shorter time in high power microwaves to keep the pieces from melting.
- 5. Place the pieces on a paper towel to dry.

Equipment

If you have questions or need more supplies, contact your home equipment provider.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 12/2019. University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing HF#5831