General Information on Mesh Nebuliser Use

Patient Information Leaflet

SingHealth
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By KKH Pharmacy Department
KK Women's and Children's Hospital
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Introduction

A nebuliser is a machine that converts liquid medication into a fine mist to be inhaled into the lungs. Your child is prescribed with the following medications to be administered with a nebuliser to treat his/her lung condition. Operate the nebuliser machine following the manufacturers' instructions

Drug Name: _____

Drug Dosage & Frequency: _____

- Wash your hands with soap and water. Rinse and dry your hands.
- Assemble the nebuliser as per instruction manual.
- Use a syringe to measure the amount of medication as prescribed unless it is the entire ampoule.
- Put the measured medication into the medication cup. You may need to add in sodium chloride 0.9% solution to make up to a final total volume of 4 to 5ml if instructed by your doctor
- Close the lid of the medication cup tightly and place the mouthpiece/facemask adaptor as instructed.
- Note: For nebulisers with exposed mesh, do not touch the mesh directly with your fingers as it will spoil the mesh.
 Hold the sides of the mesh.
- Attach the mouthpiece or facemask to the main unit.
- Turn on the main unit and check to ensure you can see the mist of medication.
- Place the mouthpiece in your child's mouth or the facemask over your child's face. Ensure a good seal.
- If possible, ask your child to breathe in and out deeply to allow better delivery of medication into lungs. If not possible, just ask your child to breathe normally.
- Your child should stay seated in an upright position during the whole treatment until the full dose is completed and you can no longer see the mist of medication.
- You may need to tilt the main unit to ensure the medication is immersed in the vibrating element*
- Tips: You can distract your child by watching TV or or doing an activity to occupy them
 during the nebulizer treatment. Puzzles, books or coloring may help the child sit still.
 Ideally, hold the child in your lap since the child should be upright to receive the optimal
 dosage of medication





Note: Do not touch the mesh.











• Turn off the nebuliser and clean up your nebuliser as per manufacturer's manual or as per KKH "General Information On Mesh Nebuliser Cleaning" information leaflet

General Information On Mesh Nebuliser Cleaning

Patient Information Leaflet

Version 2
Last Review: April 2021
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KK Women's and Children's Hospital
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Introduction

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Drug Name:	
Drug Dosage & Frequency:	



General Instructions for Cleaning of Mesh Nebuliser Parts

To ensure safety and increase the effectiveness of the treatment, it is important to keep the nebuliser clean. Follow the manufacturer's cleaning instructions after each use to prevent drying out of any remaining medication in the cup which can affect effectiveness of the nebuliser.

Note: The cleaning steps of your nebuliser may differ depending on the brands & models. Always refer to the manufacturer's manual for the specific cleaning instructions.

Before each treatment:

• Add sterile water (preferred)/ cooled boiled water to the medication cup and turn on the unit till the mist is completed. The water mist will help rinse the medication cup. Then add medication to the cup for treatment.

After each treatment:

- Wash hands thoroughly.
- Disassemble the nebuliser parts.
- Discard any remaining medication from the medication cup.
- Clean the mask/mouthpiece and mesh with sterile water (preferred)/ cooled boiled water for at least a minute.
- *For nebulisers where the mesh can be separated from the main unit, remove the mesh and clean it regularly as per manufacturer's instruction.
- Note: Do not hold mesh directly with your fingers as it will spoil the mesh. Hold the sides of the mesh to rinse.
- *For nebulisers where the mesh is hidden within the medication cup/unit, clean the unit as per manufacturer's instruction.
- Shake off excess water and place nebuliser parts on a clean towel for air drying.
- Reassemble the nebuliser parts and turn on the unit for a few seconds to dry.
- Do not wash the main unit. Use a clean towel to wipe dry the unit.



Disinfection (at least once a week):

- Wash hands thoroughly.
- Disassemble the nebuliser parts.
- Clean the nebuliser cup & mask/mouthpiece with dishwashing detergent and water
- ◆ Disinfect the nebuliser cup & mask/mouthpiece using either the cold soak* or heat methods** (depends on the manufacturer's recommendations and patient's preferences).
- Reassemble the nebuliser parts and turn on the main unit briefly for further drying.
- Do not disinfect the main unit. Use a clean towel to wipe dry.
- Consult nebulizer manufacturer's manual for specific disinfection instructions.

* Cold soak methods:

- 1) Soak in 70% isopropyl alcohol for 5 min OR
- 2) Soak in 3% hydrogen peroxide for 30 min After cold soak disinfection, rinse nebuliser parts with sterile water and allow the parts to air dry on a clean towel.

** Heat methods:

- Boil for 5-20 mins (duration depends on manufacturer's recommendations) OR
- 2) Microwave (in water) for 5 min OR
- 3) Use electric steam steriliser (~6-8 mins) After heat disinfection, carefully remove nebuliser parts and shake off excess water. Allow the nebuliser parts to air- dry

Taking Proper Care of Medications and Nebuliser

Proper use and care of the nebuliser and prescribed medications is essential to maintaining good health. Before using a nebuliser, please note the following:

- Do not use a nebuliser against medical advice. Nebulisers should only be used by the intended patient.
- Always wash hands before using a nebuliser to prevent the spread of germs.
- Make sure all medicine has not expired. Check to see that medication is clear and not discolored.
- Only use medicine that is intact and undamaged.
- Keep the medications in a safe and cool place, away from direct sunlight unless otherwise stated.
- Wash, disinfect, dry and store equipment according to manufacturer instructions after each use.
- ♦ Cleaning and disinfection should be done in a clean bowl/container instead of the sink
- Cleaning should be done after each use and disinfection at least once a week or more frequently as advised
- Check filter weekly and change the air filter at least once a month or more often if required.

Troubleshooting Nebuliser Problems

To help avoid problems, always clean the nebuliser according to the manufacturer's instructions after treatment. It is important to store it in a cool, dry place and keep it out of reach of children and pets. Please call the vendor for routine servicing as per vendor recommendations.

Common problems include:

- Loss of power: If the nebuliser uses batteries, test the batteries to be sure they are still charged.
- Clogged unit: If the unit stops working or appears to be clogged (powder/particles present in nebuliser parts), clean the mesh cap or filter according to instructions. The mesh cap should last for up to six months before needing replacement and filter life depends on the model.
- No mist: If the nebuliser seems to slow down or does not produce a fine mist after a certain period, it is time to change your nebuliser set. Be sure to change the nebuliser regularly to ensure effective treatment.

^{*}All information contained herein is intended for your general information and is not a substitute for medical advice for any lung conditions. Please note that the above list does not constitute endorsement of the abovementioned products by KK Women's & Children's Hospital. If you have any specific questions or medical care, please consult your doctor.