Nebuliser Therapy

How to use it and servicing instructions

Please bring this leaflet to your outpatient appointment

Exceptional healthcare, personally delivered
What is a nebuliser?
A nebuliser is used with an electrical compressor (nebuliser machine), which vaporises drugs so that they can be inhaled to open out the airways.

How does it work?
You may already be using an inhaler to deliver medication to your lungs. The nebuliser creates a fine mist that allows smaller particles of the medication to be breathed in efficiently. It allows a higher dose to be delivered safely when your symptoms are more severe, for example during a chest infection or when your symptoms are more difficult to control.

- You should relax as much as possible to get the most benefit from your medication.
- Sit comfortably in an upright position and breathe gently.
- Do not try to breathe quickly.
- The treatment should not be hard work.
- If a short break is required during the treatment you should switch off the compressor.

Risks of using a nebuliser and nebuliser drugs
- Inhaling large doses of drugs can, in some people, overstimulate the heart, and prolonged use of nebuliser drugs in a high dose may cause the air passages to be more irritable.
- A risk of nebuliser therapy is over use of the equipment. When some patients experience relapses they rely, with increasing frequency, on their nebuliser therapy rather than seeking urgent medical help. This is potentially a dangerous thing to do.
- You should not alter the dosage or frequency of use and must take as prescribed by your doctor.
- Nebulisers should not be used more than 4 hourly unless instructed to by your doctor.
- Mouthpieces are the preferred choice of delivery when nebulising Ipratropium Bromide (Atrovent) as it may worsen glaucoma.

**Assessment**

It is important that your GP, hospital doctor or Respiratory Nurse assess your response to the nebulised treatment. It is possible to get very good doses of medication into your lungs through means other than a nebuliser using inhalers and spacer devices such as volumatics.

**How to use the nebuliser**

1. Place on a firm flat surface, not on the floor.
2. Connect the electrical supply lead to the compressor (machine) socket and then plug into the mains supply.
3. Connect the nebuliser pot (medication pot) to the compressor with the tubing supplied.
4. To fill the nebuliser pot, unscrew the two halves so that you can pour the medication into the bottom half.
5. Empty the medication into the bottom half of the nebuliser pot, taking care to avoid the centre well. Make sure all the contents are emptied out.
6. Screw the two halves of the nebuliser pot back together.
7. Now connect either the mouthpiece or the mask to the top of the nebuliser pot.
8. Activate the “ON” switch. A fine mist will be produced for you to breathe in through the mask or mouthpiece.
9. Treatment is finished when the nebuliser starts to “spit”.
10. A small amount of liquid medicine will be left in the chamber.
Cleaning the nebuliser

After using your nebuliser separate the mask/mouthpiece and pot from the tubing. Open the pot and rinse with water, leave to air dry on a towel or tissue. When dry, reassemble so that it is ready for use.

Once a day the mask/mouthpiece and pot should be washed with warm soapy water before rinsing. This prevents bacteria growing, which could cause infection. There is no need to wash the tubing, but if it becomes wet inside run the machine with the tubing attached for a couple of minutes to dry it.

For safety reasons, please protect the machine from excess dust, heat and humidity. Please also wipe the machine from time to time with a damp cloth to remove dust and grime, which may affect its performance. Your nebuliser pot and mask/mouthpiece should be replaced every 3 months for disposable kits, or annually for durable kits. Your Respiratory Nurse will be able to advise you on which kit you have been given.

Servicing the machine

The compressor is the property of North Bristol NHS Trust. It is important that you maintain it properly. The nebuliser machine must be serviced once a year to ensure that it is working properly and safely. A small label on the machine states the date it was last serviced
Nebulised Antibiotics/Steroids at Home
A guide for patients

Why am I having this treatment?

Your consultant has prescribed you nebulised antibiotics/steroids. These are used to treat or control infections/reduce inflammation in the lungs and are usually taken twice a day. You have been given a nebuliser because it converts the antibiotic into a fine mist, enabling you to breathe it directly into your lungs. You will be advised of the duration of the course, which may be several weeks or longer. It is important that you complete the full course prescribed.

You will be provided with specialised nebulising equipment and your Respiratory Nurse will show you how to use it.

What are the advantages of using a nebuliser?

The nebuliser provides a simple and effective method of delivering antibiotics/steroids directly to your lungs.

Are there any side effects associated with using a nebulised antibiotic?

You will have been given a test dose of nebulised antibiotic by the Respiratory Nurse to ensure that you do not experience chest tightness or difficulty with breathing whilst inhaling the antibiotic.

However, having started the course, if you experience any of these symptoms you should immediately:

- **STOP** the nebuliser
- Take your **RELIEVER** inhaler (Salbutamol (Ventolin))
- **Contact your Respiratory Nurse or GP as soon as possible**
Before you start:

- Take your reliever inhaler or nebuliser (Salbutamol (Ventolin), Ipratropium Bromide (Atrovent) (Combivent) at least 15 minutes before using the nebulised antibiotic/steroids.

- If you are carrying out breathing exercises (Active Cycle of Breathing Technique) this should be done after using your reliever but before the antibiotic.

- Prepare the antibiotic as instructed below and place into the pot as you have been shown.

- Use the filter provided to prevent sticky deposits on your furniture, but more importantly to prevent other people in the household from breathing in any of the antibiotic mist. Ideally, the procedure should be done alone in a well-ventilated room.

- Nebulisation may take up to 20 minutes depending on the dose you are taking. Treatment is finished when the nebuliser starts to “splutter” and no mist is visible.
When you have finished:

- Rinse your mouth, gargle with water and then spit out after use. This will reduce the likelihood of side effects such as thrush or mouth ulcers.

- After every use, remove the filter and discard. Use a new filter for every dose.

- After every use, take the ventsream nebuliser and filter holder apart and wash all parts, except the tubing, in warm soapy water. Rinse in clean water and dry thoroughly. Wet equipment encourages bacteria growth. The tubing must not be washed but should it become wet inside attach it to the nebuliser compressor, switch the machine on and let it run for a few minutes. This will dry out the tubing.

- Dispose of all sharp objects if appropriate safely in the yellow container provided.

- Once a week boil the equipment (but not the tubing) in water with 2-3 drops of liquid detergent for 6 – 10 minutes, rinse in clean water and dry thoroughly. This will ensure the jets remain clear of drug residue.

- The nebuliser and filter holder kits are durable and only need to be replaced yearly. If you are having a gap in treatment please wash by the boiling method and store safely with a record of the date it was first used, in case of any further need for use within the year period.

- Contact the Respiratory Nurses to order new equipment and replacement filters when needed.
References


Chronic Obstructive Pulmonary Disease (COPD): National clinical guideline for management of COPD in adults in primary and secondary care. 2010


The British Thoracic Society website available at: www.brit-thoracic.org.uk

If you or the individual you are caring for need support reading this leaflet please ask a member of staff for advice.

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