



Nebulised Hypertonic Saline (7% Nebusal)

Inhaled mucolytics are an important part of therapy when sputum can be thicker and harder to clear.

Inhalation (breathing medication into the lungs) via a nebuliser is an excellent delivery technique as it allows treatment to be delivered directly where it is needed, into the lungs and the airways.

The 'fine mist' created by a nebuliser allows particles of the medication to be inhaled efficiently enabling a fine layer of hypertonic saline to reach the smaller airways of the lungs. This causes an immediate increase in the airway fluid layer allowing mucous to flow and move more easily towards the upper larger airways to be expectorated.

How to prepare the hypertonic saline

• **Nebulised hypertonic saline can be taken twice daily in combination with chest physiotherapy as part of your airway clearance regime**

- Any inhaled bronchodilator should be taken at least 10 minutes before
- Bronchodilators can be nebulised (Salbutamol / Terbutaline) or via an inhaler (Salbutamol / Bricanyl – blue; Symbicort – white and red).

- Wash your hands

- You will need to prepare the following on a clean / dry surface

1. 1 ampoule of 4ml vial of 7% Hypertonic Saline
2. Nebuliser e.g. eFlow / iNeb (Lilac Chamber 2 nebulisations) / Porta-Neb / Pari-Boy (patient specific)
3. Nebuliser handset

- Check the ampoule of hypertonic saline is of the prescribed dose, 4ml / 7% and "use by" date is still "in date"

- Open the 7% hypertonic saline and put the solution into the nebuliser chamber, attach nebuliser mouth-piece

How to administer nebulised hypertonic saline

- Your nebuliser will run off the mains or via battery
- If a Porta-Neb / Pari-Boy is used then it should be positioned on a clean dry surface (not on the carpet)
- Switch on, sit upright and breathe in and out through the mouthpiece ensuring lips are sealed tightly around mouthpiece throughout treatment
- You may need to stop the nebuliser at regular intervals to perform breathing exercises and to huff/cough to clear sputum as directed by your physiotherapist
- Treatment is finished when there is no further mist being produced, turn off your nebuliser. If you are using the iNeb / eFlow then these devices should turn off when treatment is complete
- Drink some water after treatment to clear the salty taste from your mouth

To gain the most benefit from your medication

- Breathe at a rate that is comfortable
- Do not talk whilst using your nebuliser

PLEASE NOTE: Once a successful hypertonic saline trial has been completed, 7% hypertonic saline can be administered via an ultrasonic nebuliser in larger quantities or as a diluted solution with 0.9% sodium chloride.



Please refer to Clinical Standard Operating Procedure (SOP) INSTRUCTIONS FOR SETUP AND MAINTENANCE OF THE ULTRASONIC NEBULISER

Cleaning the Nebuliser

It is vital to clean and dry your nebuliser properly otherwise germs will thrive and the time taken to nebulise will increase.

Please clean equipment after every use as follows:

- Take the nebuliser apart completely
- Soak immediately in warm water with washing up liquid for five minutes (except for the tubing)
- Place on paper towel to air dry completely (at least 4 hours)

Disinfection of Nebuliser

- At least once a week the nebuliser needs to be disinfected by: -

1. Steaming

- A 'steam steriliser unit' (electric only) should be used
- It is recommended that items are sterilised for 15 minutes
- Follow instructions of steam steriliser
- Place on paper towel to air dry completely (at least 4 hours)

Or

2. Boiling

- Place all parts of your nebuliser (except for the tubing) in boiling water for at least 15 minutes. Ensure that there is sufficient water in the pan throughout so that parts do not come in to contact with the hot pan.
- Place on paper towel to air dry completely (at least 4 hours)

It is essential that the nebuliser parts are completely dry before they are reassembled.

Care of the Nebuliser unit

Regularly wipe clean