Nebulizer Treatment

Proper technique in the administration of aerosolized bronchodilator is crucial to its successful delivery into the lower airways.

If a patient is using a "spray inhaler" alone, they may not be getting all their medication. These "spray inhalers" provide a convenient and effective method for delivering drugs, but it is not easy to use them correctly. You must carefully time each inhalation while squeezing the "spray inhaler" downward. If your timing is incorrect, the full dose of medication may not be delivered deep within your lungs.

Instruction for Use Of Nebulizer

1. Assemble nebulizer. This consists of O₂ tubing, mouthpiece mist chamber, and drug reservoir.
2. Draw up appropriate amount of Albuterol (Ventolin) Solution into a syringe. Patient >1 year or >10kg = 2.5 mg. Patient <1 year or <10 kg = 1.25 mg.
3. For initial treatment only, draw up appropriate amount of Ipratropium Bromide (Atrovent) into a syringe. Patient <8 years = 0.25 mg. Patient >8 years = 0.5mg. Additional treatments do not include Atrovent.
4. Inject the solution into the nebulizer reservoir through the appropriate opening.
5. Add sterile Normal Saline solution. If >1 year or >10 kg = 2.5 ml. If <1 year or <10 kg = 1.25 ml. (Mixed Albuterol in Normal Saline is 0.083% = 2.5 mg in 3 ml and 0.083% = 1.25 mg in 1.5 ml). Using premixed Albuterol does not require the addition of Normal Saline.
6. Gently swirl the nebulizer to mix the contents and connect it with the mouthpiece or face mask.
7. Connect the nebulizer to the oxygen tubing.
8. While in a comfortable, upright position, have the patient place the mouthpiece in his mouth.

9. Connect the tubing to the oxygen supply and set flow at 6-8 liters/minute, for adult and pediatric; 3 liters/minute for infant.

10. The patient should breathe as calmly, deeply and evenly as possible until no more mist is formed in the nebulizer chamber (about 5-15 minutes). Towards the end of the treatment, you may need to slowly increase the flow to the twin jet nebulizer to ensure all medication is nebulized. At this point, the treatment is finished.

CAUTION:

Therapy shall be discontinued should any adverse reaction such as light-headedness, rise in heart rate of 20%; extreme tremor, or bronchospasms occur or increase in frequency of P.V.C.’s.

Operating Instructions

1. Fill the reservoir with the prescribed medication. Place the cap on the reservoir and turn clockwise until snug.

2. Insert the outlet of the nebulizer into the tee. Insert the mouthpiece into the tee.

3. Connect the oxygen supply tubing from the prescribed oxygen source (wall outlet with flowmeter or portable device) to the inlet on the reservoir.

4. Set the oxygen flow to the prescribed rate.
NOTE:

The nebulizer operates best from upright to a 45 degree tilt and will not spill contents when laid on its side or overturned.

Combined Use With Bag-Valve Device

When using a bag-valve device to support ventilations, the nebulizer should be inserted in-line between the bag-valve device and the mask or ETT.