

Successful Imaging with Medi/Nuclear's Radioaerosol Products

Insta/Vent™, Insta/Vent™ Plus, Aero/Vent™ Plus, Aero/Vent™ Jr.

1. Explain to the patient the test procedure.
2. It is best to vent the patient in an adjoining room. With the advent of the new detector heads which have fans that bring in room air to cool the detectors, it is possible that if the patient is lying on the camera's platform some Tc99m-DTPA aerosol may escape from the patient's mouth and be drawn into the detector heads and contaminate the detectors.
3. Remove all the contents from the plastic bag.
4. Insert the unit into the lead shield. Except for the Aero/Vent Plus, make sure that the nebulizer tip is seated into the silver oxygen/air port which is located in the cylinder inside the lead shield.
5. If using the two-tube system, hold the body of the unit while attaching the elbow of the second tube into the filter under the lead shield.
6. Attach a standard oxygen supply line to the inlet of the Lead Shield and to the oxygen source. Medi/Nuclear recommends the use of our 7' Oxygen Supply Tubing (Model#IV-605) as the end connector's internal diameter is smaller and is more efficient at holding the oxygen tubing onto the lead shield's inlet valve. For the Aero/Vent Plus Shield you must use the Aero/Vent 7' Oxygen Tubing with Lead Adapter. Additionally the oxygen regulator should be set for 50 psi.
7. While holding the body of the unit extend the tubing that is attached to the mouthpiece or mask. The tubing will extend outward 24 inches.
8. After extending the tubing, ensure that the nebulizer tip is still seated into the silver oxygen/air port. (Except for Aero/Vent Plus).
9. Insert the mouthpiece into the mouth of the patient and attach nose clip to the patient's nose. Remind the patient that the mouth is to remain securely closed around the mouthpiece and to refrain from swallowing. If a facemask is used be sure the harness is properly adjusted so that the mouth and nose are securely covered.
10. For a pre-perfusion study: For the ventilation study, use 30-40 mCi of Tc99m-DTPA in a maximum volume of 2 mL. For the perfusion study inject 4-5 mCi of Tc99m-MAA. Use the dosing time as stated in the chart listed below.
For a post-perfusion study: For the perfusion study inject 1 -1.5 mCi of Tc99m-MAA. For the ventilation study use 60-80 mCi of Tc-99m-DTPA in a maximum volume of 2 mL. Dosing time should be approximately 3-5 minutes. The Tc99m-DPTA should be injected into the nebulizer through the rubber injection septum located on the top of the body.
11. Before closing the lid check the position of the nebulizer and make sure it is still seated firmly in the silver oxygen/air port. (Except for Aero/Vent Plus)
12. Start the flow of oxygen and slowly increase the flow rate to 10-12 LPM.
13. Based on the dosing time and 40 mCi//2mL, approximately 1 mCi of activity will be deposited in the lungs and you can perform a 100-150 k scan in approximately 1 minute/view.
14. After completion of the study, place all the used parts back into the plastic bag, zip lock the bag and place the bag in the radioactive waste area.

Depending on the unit that you are using, dose the patient based upon the following chart.

Model	Insta/Vent™ Plus 2-tube	Insta/Vent™ 1-tube	Aero/Vent™ MAX 2 - tube	Aero/Vent™ 400 Plus 1 - tube	Aero/Vent™ Jr 2 - tube
Dosing Time	1 – 1.5 minutes	2 – 3 minutes	1.5 – 2.5 minutes	3 – 4 minutes	1.5 – 2.5 minutes

Rev C

