

Administering Medications through a Small Volume (Handheld) Nebulizer

Level III

Purpose

The purpose of this procedure is to safely and aseptically administer aerosolized particles of medication into the resident's airway.

Preparation

1. Obtain a physician's order as needed.
2. Review the resident's care plan, current orders, and diagnoses to determine resident needs.
3. Check the treatment record.
4. Assemble the equipment and supplies as needed.

General Guidelines

1. Follow the medication administration guidelines in the policy entitled *Administering Medications*.
2. If the resident suffers from Chronic Obstructive Pulmonary Disease (COPD), refer to the *Chronic Obstructive Pulmonary Disease (COPD), Clinical Protocol* in addition to this procedure.

Equipment and Supplies

1. Medication, as ordered;
2. Dropper or syringe (capacity to be determined by amount of medication);
3. Diluent, as ordered;
4. Nebulizer kit, including nebulizer, medication cup, T-piece, mouthpiece (or facemask), and tubing; and
5. Pressurized gas source (e.g., compressor).

Steps in the Procedure

1. Assemble equipment and supplies on the resident's overbed table.
2. Wash and dry hands.
3. Provide for the resident's privacy.
4. Explain the procedure to the resident.
5. Position the resident in semi-fowler's position.
6. Obtain baseline pulse, respiratory rate and lung sounds.
7. Wash and dry hands.
8. Draw up the medication to be nebulized.
9. Dispense medication into nebulizer cup.
10. Add the diluent, if ordered.
11. Assemble nebulizer equipment and attach to the source of gas per manufacturer's instructions.
12. After attaching the tubing to the source of gas, adjust the flow rate as ordered or per facility protocol.
13. Turn on the nebulizer and check the outflow port for visible mist.

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14. Ask the resident to hold the mouthpiece gently between his/her lips (or apply face mask).
15. Instruct the resident to take a deep breath, pause briefly and then exhale normally.
16. Encourage the resident to repeat the above breathing pattern until the medication is completely nebulized, or until the designated time of treatment has been reached.
17. Remain with the resident for the treatment.
18. Monitor resident.
19. Monitor for medication side effects, including rapid pulse, restlessness and nervousness throughout the treatment.
21. Stop the treatment and notify the physician if resident has unwanted side effects such as increased pulse or nausea and vomiting.
21. Tap the nebulizer cup occasionally to ensure release of droplets from the sides of the cup.
22. Encourage the resident to cough and expectorate as needed.
23. Administer therapy until medication is gone.
24. When treatment is complete, turn off nebulizer.
25. Wash and dry hands.
26. Obtain post-treatment pulse, respiratory rate and lung sounds.
28. Wash and dry hands.
29. When equipment is completely dry, store in a plastic bag with the resident's name and the date on it.
30. Change equipment and tubing every seven days, or according to facility protocol. Facility protocol may include using a new mask/Tpiece at every treatment. It may also include rinsing the mask/mouthpiece and canister with clean water and allowing to air dry.
31. Disinfect outside of the compressor between residents, according to manufacturer's instructions.

Documentation

The following information should be recorded in the resident's medical record.

1. The name, title and initials of the person administering the treatment.
2. The date, time and length of treatment (treatment administration record).
3. The type and amount of medication administered (medication administration record).
4. The type and source of gas.
5. Pulse, respiratory rate and lung sounds before and after the treatment.
6. Any negative outcomes.
7. Amount and characteristics of sputum production.
8. The resident's tolerance of the treatment.
9. Any adverse effects of the medication and/or treatment and physician notification, if applicable.

Reporting

1. Notify the Nurse Supervisor (or the physician) if the resident refuses the treatment.
2. Notify the Physician if nausea or vomiting occurs during treatment.

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3. Notify the Physician if the resident experiences adverse effects from the medication and any other issues that may arise during the treatment that may require follow up.

References	
Related Documents	Administering Medications Chronic Obstructive Pulmonary Disease (COPD), Clinical Protocol
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