

METERED - DOSE NEBULIZER

EQUIPMENT

1. Metered - dose- nebulizer
2. Physician's order
3. Medication (if applicable)
4. Sputum cup / disposable

PROCEDURE

SN	Nursing Action	Rationale
1.	Check the physician's order and nursing care plan.	To obtain specific instructions and / or information.
2.	Identify the patient.	To perform the right procedure on the right patient
3.	Explain the procedure to the patient and check the patient identification wrist-band against physician's written orders. Encourage the patient to participate in the procedure as possible.	To allay fears and gain patient's confidence and cooperation. To promote patient education.
4.	Ensure privacy	To avoid unnecessary embarrassment to the patient during the procedure.
5.	Wash and dry hands (refer to Hand Washing procedure).	To prevent cross infection
6.	Assist the patient to a comfortable sitting or semi-Fowler's positions. (Dependent upon type of nebulizer in use.)	The diaphragmatic excursion and lung compliance is greater in this position. This ensures maximal distribution and deposition of aerosolized particles to the basilar area of the lung.
7.	Shake the inhaler well.	To ensure mixing of the medication.
8.	Instruct patient to remove the cap from the mouthpiece.	To educate the patient to facilitate ready access to medication.
9.	Instruct the patient to hold the canister with the index finger on top and the thumb on the bottom of the canister. (see diagram).	To ensure effective and safe handling of equipment.

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10.	Instruct the patient to place the mouthpiece in the mouth and to inhale slowly while depressing the top of the canister with the index finger.	Breath carries the particles of the medications as far down into the lungs as possible.
11.	Instruct the patient to take a deep breath and exhale.	To achieve optimum lung expansion and medicinal effect.
12.	Instruct the patient to hold the breath as long as possible before exhaling.	To achieve optimum penetration of the drug into the lower respiratory tract of the prescribed medication.
13.	Release the index finger from the canister and remove the inhaler from the mouth.	To prevent overdose of the drug inhaled.
14.	Repeat the procedure until the prescribed dose is administered.	To allow for effective perfusion of medication.
15.	Settle patient in a comfortable position.	To assist in effective perfusion of medication.
16.	Replace canister cap after wiping dry and disposing of contaminated tissues.	Contaminated equipment may cause nosocomial infection.
17.	Wash and dry hands. [refer to Hand Washing procedure].	To prevent cross infection.
18.	Document the procedure in the appropriate charts. Evaluate the effects of the procedure and report abnormal findings.	

Nursing Alert

Monitor the heart rate before and after the treatment, for patients using bronchodilator drugs as it may produce tachycardia and palpitations.

Hand held nebulizers are also available as totalhaler with rotacaps. Refer to the instructions in the medication leaflet for application.