

VALLEYCARE
OLIVE VIEW-UCLA MEDICAL CENTER/HEALTH CENTERS
RESPIRATORY CARE SERVICES - ADULT
POLICY & PROCEDURE

NUMBER: 873

VERSION: 2

SUBJECT/TITLE: AEROSOLIZED THERAPY-METERED DOSE INHALER (MDI)

POLICY: Aerosol therapy by MDI is the responsibility of respiratory therapy department. A written physician's order is to precede the allocation of MDI.

PURPOSE: To explain the procedure of delivering aerosolized medication through MDI.

DEPARTMENTS: RESPIRATORY CARE SERVICES

DEFINITIONS: Metered Dose Inhaler (MDI) - a device that delivers a specific amount of medication to the lungs, in the form of a short burst of aerosolized medicine.

Vital Capacity (VC) – is the maximum amount of air a person can expel from the lungs after a maximum inspiration.

PROCEDURE: **Treatment Criteria (Objectives)**

- Delivery of aerosolized medications.
- Relief of bronchospasm.
- Increase the VC.
- Decrease mucosal edema.
- Humidification of the respiratory tract.
- Mobilization of bronchial secretions.
- Promote cough.

Treatment Procedure of MDI

Confirm and Clarify Physician Orders.

Read the patients chart checking for:

- Appropriate orders.
- Mode of therapy.
- Medication(s) and Dosage.
- Frequency of therapy.
- Therapeutic objectives
- Diagnosis.
- Vital signs.
- Present medical status.

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Gathering Equipment

- Appropriate spacer with or without mask.
- MDI canister ordered.
- All MDI's are to be kept in the pyxis bottom drawer.

Treatment Administration for MDI

- Wash hands.
- Place the patient in a comfortable semi-Fowler's position. Diaphragmatic excursion is greater in this position.
- Shake the MDI canister well immediately before each actuation.
- Remove the cap from the mouthpiece.
- Insert the MDI canister into the spacer.
- Make sure the canister is fully and firmly inserted in the actuator.
- With one hand behind the patient head (for mask TX); place spacer mask to the patient chin than seal mask to face by pressing the top of the mask to the nose.
- Gently press the spacer/MDI into face.
- With a breath, press the MDI canister to release medication.
- Allow 2 to 4 breaths before releasing another dose from the MDI canister.
- Watch for patient cough.
- All equipment and medications are kept in the nursing medication cabinet. They are not kept in the patient room.
- Chart procedure.

MDI with ETT or Ventilator

To deliver MDI aerosolized medications through an ETT or ventilator attaché an *Aerovent* adaptor directly inline between the ventilator patient wye and ETT. With a ventilator breath press the actuator to give a puff of medication, wait 2-3 breaths than repeat if ordered.

Precautions / Hazards

- Inability of patient to cooperate in taking deep breaths.
- Adverse reactions to specific medications.
- Increase bronchospasm from aerosol.
- Use of mask may be an irritation.

Documentation

All documentation will be done in the hospital EHR, ORCHID. The Metered Dose Inhaler documentation is in the RT Therapy and Treatment section, under Metered Dose Inhaler. Documentation can also be done by clicking on the Metered Dose Inhaler task in the Multi-patient Task List (MPTL).

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References:	
Approved by: Arnold Panganiban (Chief of Respiratory Therapy), Nikhil Barot ()	Date: 05/17/2019
Review Date: 05/17/2022	Revision Date:
Distribution: Respiratory Care	
Original Date: 05/17/2019	