Administration of Medication via Metered Dose Inhaler

A Review for QMA’s
Inhaled Medications

Some corticosteroids and bronchodilators are inhaled into the respiratory tract through the mouth. Inhaled drugs affect the bronchial smooth muscle. Therefore absorption and onset of action are rapid
Metered-dose inhalers (MDI) are commonly used. An MDI is a small pressurized canister that contains a spray, mist, or fine powder. A measured (metered) amount of the drug is released for inhalation each time the dispensing valve is pushed or squeezed.
Metered Dose Inhalers (MDI)

Usually come in 3 pieces

• A mouthpiece
• A cap that covers the mouthpiece
• A canister of medication
Technique for Proper Use

• Press the canister into the mouthpiece.
• Take the cap off the mouthpiece.
• Hold the inhaler upright and shake the inhaler.
• If you need to determine if there is still medication in an inhaler, place the canister in a cup of water. If it sinks, it still has medication. If it floats, it is empty.
Technique for Proper Use

- Instruct the resident to tilt their head back slightly, and breathe out through their mouth.
- Position the inhaler for administration. There are three methods to use:
  1. Put the inhaler an inch or two away from the resident’s open mouth.
  2. Have the resident put their lips all the way around the mouthpiece.
  3. Attach an inhaler spacer to the mouthpiece and have the resident put their lips all the way around the spacer mouthpiece.
Technique for Proper Use

• Just as you press down on the canister, instruct the resident to breathe in slowly over 3 – 5 second. If the resident has trouble breathing at the right time, use a spacer. The spacer will hold the medication until the resident is ready to breathe.

• Instruct the resident to try to hold their breath for 10 seconds to allow the medication to reach deeply into the lungs. Remove the inhaler or spacer from the resident’s mouth. Instruct the resident to let their breath out easily.
Technique for Proper Use

• If the resident is taking more than 1 puff of medication, wait at least one full minute before dispensing the second puff of medication.

• Have the resident rinse their mouth out following use of metered dose inhalers (do not swallow the water) to help prevent oropharyngeal fungal infections.
Bronchodilator/Beta Agonist MDI’s

• albuterol – Ventolin; Proventil; metaproterenol – Alupent

• These agents work by promoting bronchodilation by relaxing bronchial smooth muscle
  a. Wait one minute between “puffs” for multiple inhalations of the same medication
  b. Wait 1 – 2 minutes before administering next medication
Anticholinergic MDI

• ipratropium – Atrovent
• Antagonizes the action of acetylcholine with resulting bronchodilation
• Has minimal systemic activity
• Is used for maintenance therapy only, not for acute episodes
Corticosteroid MDI’s

• beclomethasone – Beclovent; triamcinolone – Azmacort; flunisolide – AeroBid; dexamethasone – Decadron

• Anti-inflammatory agents that may have a variety of actions useful in management of COPD

• Must be used on a regular basis, not PRN

• Has minimal systemic activity
REMEMBER

• Practice hand hygiene
• Record the right documentation in the electronic medication record
• Report and record any specific resident observations or concerns
You have completed the presentation on the Administration of Medication via Metered Dose Inhaler. To receive credit, please print out this page with your name and date printed on it and send it to Diane Mustard in Staff Development.

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