

STEAM INHALATION

Definition

- Inhalation is defined as the taking air or other vapors into lungs through mouth or nose .It is the breathing of a vapor containing a medication

Types of inhalation

1. Dry inhalation :

- The inhalation of fumes from volatile drugs , is known as dry inhalation
- Ex : ether , chloroform , nitrous oxide , menthol , eucalyptus , spirit , ammonia

2. Moist inhalation :

- The inhalation of plain steam or steam impregnated with a drug is known as moist inhalation
- Moist steam inhalation is defined as utilization of moist heat to loosen lung congestion & helps to liquefy secretions
- Ex : steam , tincture benzoine

Purposes

- To relieve the inflammation of mucus membrane in acute colds & sinusitis
- To relieve the irritation in bronchitis & whooping cough by moistening
- To provide the antiseptic action on the respiratory tract

- To provide warmth & moist air following operations ex: tracheostomy
- To soften secretions which are thick & tenacious
- To relieve the cough



General instruction

- The temperature of water should remain between 120 to 160 °F or 54.5-76.7 °C
- Water in inhaler should remain just below the spout to avoid the scalding
- The spout of inhaler must be placed in such a way that the patient cant touch it or put his face too near



Directions for the use are as follows:- "Remove the rubber stopper, and fill the round bell full of hot water, then pour the water to be employed upon the sponge contained in the inhaler."

- Keep the patient warm & prevent drought before , during & when inhalation
- When volatile groups like methods used , keep clients eyes closed to prevent drug irritation to the conjunctiva
- Observe the patient closely through out the procedure

Preliminary assessment

- Check :
 - The doctor's order for any specific instruction
 - General condition & diagnosis of patient
 - Self care ability to follow instruction
 - Type, duration & medication of inhalation
 - Articles available in unit

Preparation of patient & environment

- Explain the procedure to the patient
- Allow the patient to empty the bladder & bowel , if necessary give bed pan or urinal to bed ridden patient
- Provide fowler's position with back rest , cardiac table & extra pillows
- Close windows , door & put off the fans to prevent draught

- Provide sputum mug with in the reach of patient
- Provide a face towel to remove sweat from face during inhalation
- Mouth piece should be boiled & cooled before use
- Arrange the articles at bed side
- Keep the client's eyes closed incase volatile drugs are used because volatile drugs may irritate the conjunctiva

Preparation of article

- A tray containing :
 - Nelson's inhaler - use as vaporizer
 - A bowl with tissue paper or gauze piece – to wipe secretion
 - A sputum mug – to cough & collect the secretion
 - A spout of inhaler is plugged with a cotton swab – to prevent steam loss
 - Seal the mouth piece , It is wrapped with gauze piece

- Ounce glass – to measure the tincture benzoine etc
- Tr. Benzoine in a bottle – to pour the medicine
- Spirit in a bottle & swab stick – to clean the inhaler after use
- A towel to cover the inhaler & a bowl to keep the inhaler – to prevent the burns

- A kettle with boiling water – to prepare the solution
- A pint measure – to measure the water
- An extra blanket or sheet – to cover the patient to prevent the loss of steam
- A cardiac table – to give a comfortable position to patient

Steps of procedure

- Explain the procedure
- Wash hands
- Measure the capacity of the inhaler with cold water . Measure the capacity when it is filled half to 2/3 full
- Warm the inhaler by pouring a little hot water into the jug & emptying it

- Pour the required amount of inhalant into the inhaler & fill the jug 2/3 with hot water , the water should remain just below the spout
- If it is ordered , add tr. Benzoine
- place the mouth piece & close the inhaler tightly , see that the mouth piece is in the opposite direction to the spout
- Cover the mouth piece with a gauze piece & plug the spout with a cotton ball

- Cover the inhaler with a towel
- Place the inhaler in the basin & take it to the bed side without losing time
- Place the apparatus conveniently in front of the patient with the spout opposite to the patient , remove the cotton plug & discard it into the paper bag

- Instruct the patient to inhale by mouth & exhale through the nose for 15-20 minutes
- Keep a sputum cup & a face towel near the patient & observe him/her frequently
- Remove the inhaler , keep the patient in a comfortable position & well covered for an hour
- Record the treatment , its effectiveness & condition of the patient

- Wash the mouth piece of the inhaler with a swab & running water & boil it for the next use
- Clean the drug glass with spirit swab sticks
- Clean all articles & replace properly