Nasotracheal Suctioning (NTS)

Purpose

To standardize the use of Nasotracheal suctioning (NTS), a component of bronchial hygiene therapy.

Scope

NTS is intended to remove accumulated secretions, blood, vomitus and other foreign material from the trachea that cannot be removed by the patient's cough or other less invasive procedures. NTS has been used to avoid intubation that was solely intended for the removal of secretions.

NTS refers to the insertion of a suction catheter through the nasal passage and pharynx into the trachea in order to aspirate accumulated secretions or foreign material.

Audience

All licensed respiratory therapists in the Respiratory Care Services Department

Physician's Order

- Order for NTS
- Frequency of NTS

Indications

The need to maintain a patient airway and remove secretions or foreign material from the trachea in the presence of the inability to clear secretions, audible evidence of secretions in the large/central airways that persist in spite of patient's best cough effort.

Possible Hazards/ Complications

- Mechanical trauma
- Hypoxia/hypoxemia
- Cardiac dysrhythmias/arrest
- Bradycardia
- Increase in blood pressure
- Hypotension
- Respiratory arrest
- Uncontrolled coughing
- Gagging/vomiting
- Laryngospasm
- Bronchoconstriction/bronchospasm
- Pain
- Nosocomial infection
- Atelectasis
- Misdirection of Catheter
- Increased ICP

Procedure

Continued next page

Step	Action
1	Verify Physicians order.
2	Assess patient and patient airway; determine preferred nare
3	Pre-oxygenate patient for at least 30 seconds
4	Adjust suction to appropriate level; lubricate nasopharyngeal airway with water-soluble lubricant
5	Remove pillow and position patient's head
6	Put on sterile gloves and maintain clean technique throughout procedure
7	Attach catheter to suction source
8	Reassure patient; removes oxygen source
9	Insert catheter into the nare
10	Pass catheter into the oropharynx and into trachea
11	Advance catheter until resistance is met (without suction applied)
12	Apply suction and rotate/withdraw catheter for a maximum of 10 to 15 seconds
13	Frequently assess patient for oxygenation status, including pulse oximetry
14	Re-oxygenate patient for at least 1 minute
15	Reassess patient and repeat if necessary

Discontin-uation

Patients will be evaluated after every treatment. A complete respiratory assessment will be done every 72 hours as indicated. Based on the assessment, the therapist will make recommendations for changes in therapy or discontinuance as needed.

References

AARC Clinical Practice Guidelines: "Nasotracheal Suctioning," Respiratory Care 1992; 37:898-901

Butler, Thomas J., Close, Janice R., Close, Robert J. Laboratory Exercises for Competency in Respiratory Care. 1998:255.

Continued next page