

Nursing Diagnosis Problem, Etiology, Symptoms	Expected Outcomes	Nursing Intervention	Rationale	Evaluation
<p>P: Ineffective Airway Clearance</p> <p>E: Neurological dysfunction, airway spasm, excessive mucus production, airway obstruction, retained secretions, and secretions in the bronchi.</p> <p>S: Abnormal breath sounds noted (wheezing), decrease respiratory rate, dyspnea, inability to clear airway secretions, and cyanosis.</p>	<p>Patient will maintain a patent airway at all times as evidence by a normal breathing rate of 22-34 breaths per minute. Patient will demonstrate the ability to effectively remove airway secretions through coughing and deep breathing methods. Patient will be able to demonstrate deep breathing and airway secretion removal techniques to the nurse with two days and prior to discharge. Patient will be able to identify and avoid potential risk factors that can contribute to ineffective airway clearance.</p> <p>Goal: Patient participated in procedures to optimize airway clearance evidence by usage of incentive spirometer, the nurse will encourage the patient to utilize the incentive spirometer as often as possible for a minimum of ten times per day. At the end of each day the nurse will document the maximum tidal volume as determined by the piston and marker on the incentive spirometer. The nurse will set a goal for 500ml by the end of the week and prior to discharge.</p>	<p>1) Auscultate lung sounds every 1 to 4 hours.</p> <p>2) Monitor respiratory patterns, including rate, depth, and effort every hour.</p> <p>3) Position the client in a position to optimize respirations, patients head of bed should be in a 30-45 degree and repositions patient every two hours.</p> <p>4) Help the client deep breath and perform controlled coughing. Have the client inhale deeply , hold breath for several seconds, and cough two or three times with mouth open while tightening the upper abdominal muscles every 4 hours and document how the client tolerated intervention.</p> <p>5) Educate parents about risk factors for ineffective airway clearance such as foreign body ingestion, excessive mucus production, retained secretions, and secretions in the bronchi prior to patient discharge with the use of videos, pamphlets, educational handouts, and contact information.</p> <p>6) Assess clients understanding of deep breathing exercises and coughing exercises daily and prior to beginning of new interventions.</p>	<p>1) Abnormal breath sounds can be detected through auscultation and may indicate ineffective airway clearance.</p> <p>2) This will allow for early detection of ineffective airway clearance and ineffective breathing pattern. hypoxia.</p> <p>3) Positioning the patient in the upright position promotes the maximum lung expansion and improved air exchange.</p> <p>4) Chest physical therapy will help mobilize secretions from smaller airways and prevent further airway obstructions.</p> <p>5) This promotes caregiver role involvement in treatment and effective understanding of nursing intervention implications for the overall well-being and health of the client.</p> <p>6) Patient will understand the underlying techniques associated with airway clearance this will enhance intervention regimen compliance.</p>	<p>The goal of maintaining a patent airway through the teaching methods of airway clearance, utilization of the incentive spirometer, deep breathing exercise, patient positioning, and educational teaching have been meet.</p> <p>The patient was able to utilize the incentive spirometer for the entire duration of his stay, during the beginning he was only able to utilize the incentive spirometer for four times a day however within one week the patient was able to utilize the incentive spirometer for ten – eleven times a day exceeding the tidal volume goal set forth by the respiratory therapist.</p> <p>Within one week the patient was able to demonstrate deep breathing and secretion removal techniques with an understanding that was age appropriate.</p> <p>The patient was expected to meet goals within one week and did succeed. Patient was able to verbally and physically demonstrate learning techniques to parent, physician, and nurse.</p>

Reference

Ackley, B., & Ladwig, G., *Guide to Nursing Diagnosis Fourth Edition*, 2014

Carman, S., & Kyle, T., *Essentials of Pediatric Nursing Third Edition*, 2017