

Nursing Alert

Suctioning is carried out only as often as needed to keep the tube patent. Signs of mucus partially occluding the airway include an increased heart rate, a rise in respiratory effort, a drop in oxygen saturation, cyanosis, or an increase in the positive inspiratory pressure on the ventilator.

Accidental decannulation also requires immediate tube replacement. Some children have a fairly rigid trachea, so the airway remains partially open when the tube is removed. However, others have malformed or flexible tracheal cartilage, which causes the airway to collapse when the tube is removed or dislodged. Because many infants and children with upper airway problems have little airway reserve, if replacement of the dislodged tube is impossible, a smaller-sized tube should be inserted. If the stoma cannot be cannulated with another tracheostomy tube, oral intubation should be performed.

Chest Tube Procedures

A chest tube is placed to remove fluid or air from the pleural or pericardial space. Chest tube drainage systems collect air and fluid while inhibiting backflow into the pleural or pericardial space. Indications for chest tube placement include pneumothorax, hemothorax, chylothorax, empyema, pleural or pericardial effusion, and prevention of accumulation of fluid in the pleural and pericardial space after cardiothoracic surgery. Nursing responsibilities include assisting with chest tube placement, managing chest tubes, and assisting with chest tube removal.

Before chest tube insertion, assess hematologic and coagulation studies for any risk of bleeding during the procedure. Notify the physician of abnormal findings. Prepare the drainage system with sterile water as described in the package insert (some systems may not require this step). Administer pain and sedation medications as ordered. Monitor airway, breathing, circulation, and pulse oximetry throughout the procedure.

After the tube has been inserted and connected to the chest drainage system, secure the tubing so that it does not become disconnected. If suction is required, use connection tubing to join