



FIG 20-26 Tracheostomy suction catheter insertion. Note that the catheter is inserted just to the end of the tracheostomy tube.

The child is allowed to rest for 30 to 60 seconds after each aspiration to allow oxygen saturation to return to normal; then the process is repeated until the trachea is clear. Suctioning should be limited to about three aspirations in one period. Oximetry is used to monitor suctioning and prevent hypoxia.

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 arterial oxygen saturation (SaO_2), cyanosis, and an increase in the positive inspiratory pressure on the ventilator.

In the acute care setting, aseptic technique is used during care of the tracheostomy. Secondary infection is a major concern because the air entering the lower airway bypasses the natural defenses of the upper airway. Gloves are worn during the aspiration procedure, although a sterile glove is needed only on the hand touching the catheter. A new tube, gloves, and sterile saline solution are used each time.

Routine Care

The tracheostomy stoma requires daily care. Assessments of the stoma area include observations for signs of infection and breakdown of the skin. The skin is kept clean and dry, and crusted