

seasonal allergens. Successful treatment is continued for a minimum of 3 years and then stopped. If no symptoms appear, acquired immunity is assumed; if symptoms recur, treatment is reinstituted. Hyposensitization injections should be administered only with emergency equipment and medications readily available in the event of an anaphylactic reaction.

Status Asthmaticus

Status asthmaticus is a medical emergency that can result in respiratory failure and death if untreated. Children who continue to display respiratory distress despite vigorous therapeutic measures, especially the use of sympathomimetics (e.g., albuterol, epinephrine), are in status asthmaticus. The condition may develop gradually or rapidly, often coincident with complicating conditions, such as pneumonia or a respiratory virus, that can influence the duration and treatment of the exacerbation.

Nursing Alert

A child with asthma who sweats profusely, remains sitting upright, and refuses to lie down is in severe respiratory distress. Also, a child who suddenly becomes agitated or an agitated child who suddenly becomes quiet may have serious hypoxia and requires immediate intervention.

Therapy for status asthmaticus is aimed at improving ventilation, decreasing airway resistance, relieving bronchospasm, correcting dehydration and acidosis, allaying child and parent anxiety related to the severity of the event, and treating any concurrent infection. Humidified oxygen is recommended and should be given to maintain SaO_2 greater than 90%. Inhaled aerosolized short-acting β_2 -agonists are recommended for all patients. Three treatments of β_2 -agonists spaced 20 to 30 minutes apart are usually given as initial therapy, and continuous administration of β_2 -agonists via nebulizer may be initiated. A systemic corticosteroid (oral, IV, or IM) is given to decrease the effects of inflammation. An anticholinergic agent (such as ipratropium bromide) may be added to the aerosolized solution of the β_2 -agonist. Anticholinergics have been shown to