

Monitoring vital signs, output, fluid infusion, and respiratory parameters are ongoing activities in the hours immediately after injury. IV infusion is begun immediately and is regulated to maintain a urinary output of at least 1 to 2 ml/kg in children weighing less than 30 kg (66 pounds); an output of 30 to 50 ml/hr is expected in children weighing more than 30 kg. Urinary output and specific gravity, vital signs, laboratory data, and objective signs of adequate hydration guide the rate of fluid administration.

Children who are hospitalized with burns require constant observation and assessment for complications. Alterations in electrolyte balance produce clinical symptoms of confusion, weakness, cardiac irregularities, and seizures. Changes in respiratory function and gas exchange are reflected clinically by restlessness, irritability, increased work of breathing, and alterations in blood gas values. The loss of protective function of the skin exposes burned children to increased risk of hypothermia. Edema formation and circulatory impairment result in the loss of sensation and deep, throbbing pain.

Nursing Alert

Evaluate the burned extremity and check the pulse every hour. If unable to palpate, use a Doppler (an ultrasonic pulse probe that can detect blood flow) to ascertain loss of circulation and pulse. If the pulse is lost, escharotomy may be necessary to relieve the edema causing pressure on blood vessels to restore adequate circulation.

Burn centers maintain a pictorial record of the burns to record progress and for legal purposes (if child abuse is suspected). Burn wounds are treated according to the protocol of the specific burn center. The burn team monitors infection control procedures and ensures that staff and visitors comply with established protocols to prevent cross-contamination in the burn unit.

Throughout the acute phase of care, the psychosocial needs of the children and their families are carefully considered. The child is frightened, uncomfortable, and often confused. Children may be isolated from familiar persons and surroundings; the overwhelming physical needs at this time are the primary focus of