bladder control (Hayes and Arriola, 2005).

Neurogenic shock occurs as a result of a disruption in the descending sympathetic pathways with loss of vasomotor tone and sympathetic innervations to the cardiovascular system (Hayes and Arriola, 2005). Hypotension, bradycardia, and peripheral vasodilation occur as a result of neurogenic shock.

Children with suspected SCI may have suffered multiple injuries (e.g., head injury); therefore, multiple clinical manifestations may occur that may mask those of an SCI.

Therapeutic Management

Initial care begins at the scene of the accident with proper immobilization of the cervical, thoracic, and lumbar spine. Because of the complexity of these injuries, it is usually recommended that these persons be transported to a spinal injury center for care by specially trained health care personnel as soon as possible after the injury for appropriate diagnostic evaluation and intervention.

The initial management of the child with a suspected SCI should begin with an assessment of the ABCs—airway, breathing, and circulation. Guidelines for the child who is found unconscious with an unknown cause are discussed in Chapter 23 (Cardiopulmonary Resuscitation). The airway should be opened using the jaw-thrust technique to minimize damage to the cervical spine. The child is monitored for cardiovascular instability, and measures are taken to support systemic blood pressure and maintain optimal cardiac output. Because MVA and other trauma in children may involve internal organ damage and potential bleeding, abdominal distention and other signs are acted on immediately to prevent further systemic shock. After the child is stabilized and transported to a regional trauma center, a thorough evaluation of neurologic status and any other associated trauma is carried out by the multidisciplinary team. In the emergency department, spinal immobilization should be maintained until a thorough neurologic assessment is completed; in children, this typically involves a CT scan and possibly an MRI. Additional interventions are discussed in the Nursing Care Management section.

SCI management guidelines and standards of care have been published for adult and pediatric patients with SCIs by the American Association of Neurological Surgeons and the Congress