

The ASIA Impairment Scale can be used to assess neurologic function on a routine basis during the patient's recovery. After the patient is admitted, further evaluation of his or her ability to perform ADLs and need for assistance during recovery can be made with the Functional Independence Measure scale.

Nursing care during the acute phase should also focus on frequent monitoring of neurologic signs to determine any changes in neurologic function that require further intervention (e.g., level of consciousness using the Glasgow Coma Scale). In addition to airway maintenance, the nurse should monitor for changes in hemodynamic status that may require immediate medical attention. Neurogenic shock consists of hypotension, bradycardia, and vasodilation. Inotropic medications may be required to maintain adequate perfusion. Renal function is closely monitored by measuring urinary output and fluids administered. The child with a head injury may experience elevated intracranial pressure; therefore, changes in neurologic status are reported to the practitioner. Fluid restriction may be required if intracranial pressure is elevated, so fluid intake should be closely monitored.

The nursing care of the child with an SCI is, in most respects, the same as that of any immobilized child (see *The Immobilized Child*, [Chapter 29](#)). Additional aspects of care that should be addressed on an individual basis include hypercalcemia in adolescent boys, DVT, latex sensitization, pain, hypothermia and hyperthermia, spasticity, autonomic dysreflexia, and sleep-disordered breathing ([Vogel, Betz, and Mulcahey, 2012](#)).

Respiratory care often focuses on maintaining an adequate airway and effective ventilation. The child with a high-level cervical injury (C3 and above) requires continuous ventilatory assistance. In most instances, a tracheostomy is the method of choice for greater ease in clearing secretions and for less trauma to tissues during long-term ventilatory dependence. In some children, breathing pacemaker devices (phrenic nerve stimulators) are implanted to stimulate the phrenic nerve and produce diaphragmatic contractions and lung expansion without assisted ventilation. In the child who does not require mechanical ventilation, special attention to clearance of secretions is vital because of decreased pulmonary function. In addition to percussion and postural drainage, the child may require a cough-assist device to clear secretions effectively (see