Common orthopedic problems requiring attention in SB include deformities of the hips, knees, feet, and spine; fractures and insensate skin further complicate orthopedic care. Other problems that may occur later include kyphosis and scoliosis (Lazzaretti and Pearson, 2010; Liptak and Dosa, 2010). Because children with this condition often have decreased sensitivity in their lower extremities, preventive skin care is important. A high percentage (60%) of children seen in a wound clinic for skin breakdown had myelomeningocele (Samaniego, 2003). The status of the neurologic deficit remains the most important factor in determining the child's ultimate functional abilities.

With technologic advances, a variety of lightweight orthoses, including braces, special "walking" devices, and custom-built wheelchairs, are available to provide mobility to children with spinal cord lesions (see also Chapter 29). Early in infancy, intervention with passive range-of-motion exercises, positioning, and stretching exercises may help decrease the incidence of muscle contractures. Corrective surgical procedures, when indicated, are best initiated at an early age so the child will not lag significantly behind age mates in developmental progress. The degree of lower extremity function guides decisions about whether orthopedic surgery will be needed.

Management of Genitourinary Function

Myelomeningocele is one of the most common causes of **neuropathic (neurogenic) bladder dysfunction** among children. In infants, the goal of treatment is to preserve renal function. In older children, the goal is to preserve renal function and achieve optimal urinary continence. Urinary incontinence is a chronic, often debilitating problem for the child. In addition, the neuropathic bladder may produce **urinary system distress**, characterized by symptomatic urinary tract infections, ureterohydronephrosis, and vesicoureteral reflux or renal insufficiency. The characteristics of bladder dysfunction in children vary according to the level of the neurologic lesion and the influence of bony growth and development on the spine. Therefore, ongoing urologic monitoring is essential. Evidence is growing that early intervention, based on evaluation during the neonatal period and before complications occur, improves bladder function, reduces the risk of subsequent