Jones MW, Morgan E, Shelton JE, et al: Cerebral palsy: introduction and diagnosis, part 1, *J Pediatr Health Care* 21(3):146–152, 2007.

Establishing a diagnosis may be facilitated by the persistence of primitive reflexes: (1) either the asymmetric tonic neck reflex or the persistent Moro reflex (beyond 4 months old) and (2) the crossed extensor reflex. The tonic neck reflex normally disappears between 4 and 6 months old. An obligatory response is considered abnormal. This is elicited by turning the infant's head to one side and holding it there for 20 seconds. When a crying infant is unable to move from the asymmetric posturing of the tonic neck reflex, it is considered obligatory and an abnormal response. The crossed extensor reflex, which normally disappears by 4 months old, is elicited by applying a noxious stimulus to the sole of one foot with the knee extended. Normally, the contralateral foot responds with extensor, abduction, and then adduction movements. The possibility of CP is suggested if these reflexes persist after 4 months old.

A number of assessment instruments are now available to evaluate muscle spasticity; functional independence in self-care, mobility, and cognition; self-initiated movements over time; and capability and performance of functional activities in self-care, mobility, and social function (Krigger, 2006).

## Therapeutic Management

The goals of therapy for children with CP are early recognition and promotion of optimal development to enable affected children to attain normalization and realize their potential within the limits of the existing health problems. The disorder is permanent, and therapy is primarily preventive and symptomatic.

Therapy has five broad goals:

- 1. To establish locomotion, communication, and self-help skills
- 2. To gain optimal appearance and integration of motor functions
- 3. To correct associated defects as early and effectively as possible
- 4. To provide educational opportunities adapted to the child's needs and capabilities