

objects that occurs at 7 months old. (B, D, and E, Photos by Paul Vincent Kuntz, Texas Children's Hospital, Houston, TX.)

Locomotion

Locomotion involves acquiring the ability to bear weight; propel forward on all four extremities; stand upright with support; cruise by holding on to furniture; and finally, walk alone (Fig. 9-6).

Following a cephalocaudal pattern, infants who are 4 to 6 months old have increasing coordination in their arms. Initial locomotion results in infants propelling themselves backward by pushing with their arms. By 6 to 7 months old, they are able to bear all of their weight on their legs with assistance. **Crawling** (propelling forward with the belly on the floor) progresses to **creeping** on hands and knees (with the belly off the floor) by 9 months old. At this time, they stand while holding on to furniture and can pull themselves to the standing position, but they are unable to maneuver back down except by falling. By 11 months old, they walk while holding on to furniture or with both hands held; and by 1 year old, they may be able to walk with one hand held. A number of infants attempt their first independent steps by their first birthday.

Nursing Alert

An infant who does not pull to a standing position by 11 to 12 months old should be further evaluated for possible developmental dysplasia of the hip (see Chapter 29).