

The clinical manifestations of Erb palsy are related to the paralysis of the affected extremity and muscles. The arm hangs limp alongside the body while the shoulder and arm are adducted and internally rotated. The elbow is extended, and the forearm is pronated, with the wrist and fingers flexed; a grasp reflex may be present because finger and wrist movement remain normal (Tappero, 2015) (Fig. 8-3). In lower plexus palsy, the muscles of the hand are paralyzed, with consequent wrist drop and relaxed fingers. In a third and more severe form of brachial palsy, the entire arm is paralyzed and hangs limp and motionless at the side. The Moro reflex is absent on the affected side for all forms of brachial palsy.



FIG 8-3 Left-sided brachial plexus (Erb) palsy. Note the extended, internally rotated arm and pronated wrist on the affected side.

Treatment of the affected arm is aimed at preventing contractures of the paralyzed muscles and maintaining correct placement of the humeral head within the glenoid fossa of the scapula. Complete recovery from stretched nerves usually takes 3 to 6 months. Full recovery is expected in 88% to 92% of infants (Verklan and Lopez, 2011). However, avulsion of the nerves (complete disconnection of the ganglia from the spinal cord that involves both anterior and posterior roots) results in permanent damage. For injuries that do not improve spontaneously by 3 to 6 months, surgical intervention