Erb-Duchenne and Dejerine-Klumpke Palsies

National Institute of Neurological Disorders and Stroke (NINDS)

Source

National Institute of Neurological Disorders and Stroke (NINDS). Erb-Duchenne and Dejerine-Klumpke Palsies Information Page.

The brachial plexus is a network of nerves that conducts signals from the spine to the shoulder, arm, and hand. Brachial plexus injuries are caused by damage to those nerves. Erb-Duchenne (Erb's) palsy refers to paralysis of the upper brachial plexus. Dejerine-Klumpke (Klumpke's) palsy refers to paralysis of the lower brachial plexus. Although injuries can occur at any time, many brachial plexus injuries happen when a baby's shoulders become impacted during delivery and the brachial plexus nerves stretch or tear. There are four types of brachial plexus injuries: avulsion, the most severe type, in which the nerve is torn from the spine; rupture, in which the nerve is torn but not at the spinal attachment; neuroma, in which the nerve has torn and healed but scar tissue puts pressure on the injured nerve and prevents it from conducting signals to the muscles; and neuropraxia or stretch, in which the nerve has been damaged but not torn. Neuropraxia is the most common type of brachial plexus injury. Symptoms of brachial plexus injury may include a limp or paralyzed arm; lack of muscle control in the arm, hand, or wrist; and lack of feeling or sensation in the arm or hand.