Brachial Plexus and Peripheral Nerve Program



The Brachial Plexus and Peripheral Nerve Clinic at Children's Hospital Los Angeles is one of a few centers in the country that specializes in brachial plexus disorders. It is part of the Neurological Institute where we offer treatments for children of all ages and with different types of injuries/disorders including:

- Infants with birth-related brachial plexus injuries
- Older children with traumatic brachial plexus injuries
- Tumor-related brachial plexus injuries
- Other disorders of the brachial plexus or peripheral nervous system.



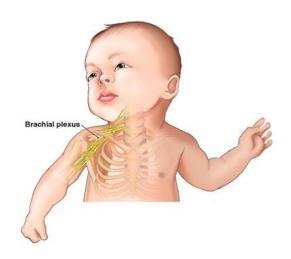
Patients in our clinic are cared for by a team of pediatric specialists. Your child will visit with each member of our team during their clinic visits. This means fewer appointments for your child and better communication between the different specialists.

Our team includes:

Orthopedic Surgeons
Neurosurgeons
Neurologists
Occupational Therapists
Hand Therapists
Social Workers

Brachial Plexus Injuries - Infants

Brachial plexus injuries in infants usually happen during childbirth. The infant's arm can be injured if there's "traction" (pulling) on the nerves going to the arm. The injury can happen to one or more of the nerves that go to the shoulder, arm, or hand. Most children will make a very good recovery from a mild stretch injury. More severe injuries may need surgery. All infants with brachial plexus injuries should begin occupational and/or physical therapy as soon as possible.



Soon after birth, your baby will visit our clinic for their first examination by our team. Over the next several months, we will continue to check your baby for signs of recovery. In most cases, children that show enough improvement by 3 to 6 months of age will not need surgery. Children that do not show signs of improvement may need more testing. We may test the electrical activity of a muscle with a test called **electromyography** (EMG). We may also take pictures inside the arm with a magnetic resonance imaging (MRI). If the medical team recommends surgery, it is usually done when your child is between 6 and 9 months of age. Occupational or physical therapy is started several weeks after surgery and can continue for up to 3 years after the surgery. Signs of recovery are commonly seen about 4 to 6 months after surgery and may continue up to 3 years after surgery.

Brachial Plexus Injuries – Children 1 Year and Older

Brachial plexus injuries in older children are usually caused by bicycle or other vehicle accidents. It is best for us to see your child soon after the injury to examine your child's arm. We may also run tests to help determine the type and nature of the injury. We may test the electrical activity of a muscle with a test called **electromyography** (EMG) or take pictures inside the arm with a **magnetic resonance imaging** (MRI). These tests help the medical team decide what the next steps should be. If surgery is recommended, it is usually done between 3 and 6 months after injury. Occupational or physical therapy is started several weeks after surgery and can continue for up to 3 years after the surgery. Signs of recovery are commonly seen about 4 to 6 months after surgery and may continue up to 3 years after.

Brachial Plexus Surgery Information:

- Done under general **anesthesia** (pain medicine used during surgery).
- Takes between 5 to 10 hours.
- Most children spend 1 night in the hospital after surgery
- Your child's arm may be supported by a special sling that must be worn for 3 weeks after surgery.

Glossary

Anesthesia - Medicine to prevent or reduce the feeling of pain or sensation during surgery or other painful procedures (such as getting stitches).

Eectromyography (EMG) – A test that measures the response of muscles and nerves to electrical activity. It is used to help find conditions that might be causing muscle weakness, such as nerve disorders. The letters "EMG" are used as a short name.

Magnetic Resonance Imaging (MRI) – Pictures of the inside of the body that are created by using magnetic energy. These images are used to help diagnose a problem or injury. The letters "MRI" are used as a short name.