

## **Brachial plexopathy**

Brachial plexopathy is pain, decreased movement, or decreased sensation in the arm and shoulder due to a nerve problem.

### **Causes**

Brachial plexus dysfunction (brachial plexopathy) is a form of peripheral neuropathy. It occurs when there is damage to the brachial plexus, an area on each side of the neck where nerve roots from the spinal cord split into each arm's nerves.

Damage to the brachial plexus is usually related to direct injury to the nerve, stretching injuries (including birth trauma), pressure from tumors in the area (especially from lung tumors), or damage that results from radiation therapy.

### **Brachial plexus dysfunction may also be associated with:**

Birth defects that put pressure on the neck area

Exposure to toxins, chemicals, or drugs

General anesthesia, used during surgery

Inflammatory conditions, such as those due to a virus or immune system problem

In some cases, no cause can be identified.

### **Symptoms**

Numbness of the shoulder, arm, or hand

Shoulder pain

Tingling, burning, pain, or abnormal sensations (location depends on the area injured)

Weakness of the shoulder, arm, hand, or wrist

### **Exams and Tests**

An exam of the arm, hand and wrist can reveal a problem with the nerves of the brachial plexus. Signs may include:

Deformity of the arm or hand

Difficulty moving the shoulder, arm, hand, or fingers

Diminished arm reflexes

Wasting of the muscles

Weakness of hand flexing

A detailed history may help determine the cause of the brachial plexopathy. Age and gender are important, because some brachial plexus problems are more common in certain groups. For example, young men more often have inflammatory or postviral brachial plexus disease called Parsonage Turner syndrome.

### **Tests that may be done to diagnose this condition may include:**

Blood tests

Chest x-ray

Electromyogram (EMG)

MRI of the head, neck, and shoulder

Nerve conduction tests

Nerve biopsy (rarely needed)

Ultrasound

## **Chiropractic Care**

When one or more vertebrae are out of alignment with the one above or below in the spine, we say that it is "subluxated". A subluxation causes pressure on the nerve that

flows from the spinal cord out of the spine, and a pinched nerve is an irritated nerve, which doesn't transmit correctly the nerve impulses and information between the brain and the body. If you tread on a hosepipe this will produce a similar effect, your foot would stop the flow of water due to insufficient pressure.

It has been proved that a subluxation and its consequent pinching of the nerve causes a limited transmission of nerve impulses to the organs and tissues of the body and may be the cause of many diseases (dis-eases), including brachial plexopathy.

The Chiropractor will carry out a series of tests to determine your if there is nerve impingement, called vertebral subluxations, and after studying your case, will proceed to adjust your spine to return health and homeostasis to your body through the nervous system.

Chiropractic care is aimed at correcting the underlying cause and allowing you to use your hand and arm as much as possible.

### **Outlook (Prognosis)**

The earlier you contact your chiropractor, the better the prognosis. The likely outcome depends on the cause. A good recovery is possible if the cause is identified and properly treated. In some cases, there may be a partial or complete loss of movement or sensation. Nerve pain may be severe and may persist for a long time.

### **Possible Complications**

Deformity of the hand or arm, mild to severe, which can lead to contractures  
Partial or complete arm paralysis  
Partial or complete loss of sensation in the arm, hand, or fingers  
Recurrent or unnoticed injury to the hand or arm due to diminished sensation

### **When to Contact a doctor of chiropractic**

Call your health care provider if you experience pain, numbness, tingling, or weakness in the shoulder, arm, or hand.

### **Alternative Names**

Neuropathy - brachial plexus; Brachial plexus dysfunction; Parsonage Turner syndrome; Pancoast syndrome

### **Reference: Extracts taken online from:**

<http://www.nlm.nih.gov/medlineplus/ency/article/001418.htm>