

HEALTH REPORT

VOLUME 11

ISSUE 30

ACUPUNCTURE IMPROVES MOTOR FUNCTION IN CHILDREN WITH CEREBRAL PALSY

A randomized controlled study by researchers in Iran has demonstrated that Acupuncture may improve motor function and reduce disabilities in children with cerebral palsy (CP).

Cerebral palsy (cerebral means “of the brain” and palsy means “movement disability”) includes a group of neurological disorders caused by damage to the motor control centers of the young developing brain. The result is that the child cannot control his or her muscles to some degree, affecting movement and posture.

The results of the study showed that conventional physical therapies and rehabilitation techniques did not change the impact of the brain developmental injuries in the child, but did show that Acupuncture significantly improved motor abilities.

The study involved a mix of 40 male and female children with CP, aged 8 to 16 years. Twenty were randomly assigned to the treatment group that received Acupuncture therapy twice a week for 4 months, and 20 to the control group who did not receive Acupuncture therapy. Both groups received standard physiotherapy and physical therapy.

The effects of Acupuncture were measured using the Gross Motor Function Measure 66 (GMFM-66), designed to measure change in gross motor function over time in children with CP, and included neurological testings of finger to nose, heel to shin, and linear movement. The mean GMFM-66 score increased significantly from 133.6 before Acupuncture to 138.3 after – significantly higher than for the control group.

80 percent of cases are from unknown causes

Families of children with CP suffer economic and emotional burdens. Rehabilitation is a long and tedious process requiring tremendous physical, mental and financial energy.

The causes of CP in about 80 percent of cases are never discovered. Where cause is known, it can include infection, malnutrition, and/or head trauma in very early childhood. Cerebral injuries occur from inadequate blood or oxygen supply to the fetus, premature birth or birth trauma, various diseases that affect the nervous system, intracranial hemorrhage of premature infants, or blood vessel damage.

CP can happen during pregnancy (about 75 percent), during childbirth (about 5 percent) or after birth (about 15 percent) up to about age three. Although developments in perinatal (the time around birth) care have dramatically reduced the death rate of newborns, the prevalence of childhood CP has been rising. In developed countries, CP occurs in about 2 to 2.5 per 1000 live births. The problems vary from case to case, and they are permanent but do not get worse. There is no specific treatment.

The authors of the study recommended longer trials with larger sample sizes to further study the benefits of Acupuncture on the central nervous system of patients with CP.