

# Management of Cerebral Palsy Through Siddha System: A Review

**Banumathi<sup>1</sup>, Sasikumar<sup>2</sup>, Ajin Bhagavath<sup>3</sup>, Dillirani<sup>4</sup>**

<sup>1</sup>CRRI, JSA Medical College for Siddha and research centre, Pali, Ulundupet, Tamilnadu.

<sup>2</sup>Guide & Assistant Professor, Department of Kuzhanthai Maruthuvam, JSA Medical College for Siddha and research centre, Pali, Ulundupet, Tamilnadu.

<sup>3,4</sup>CRRI, JSA Medical College for Siddha and research centre, Pali, Ulundupet, Tamilnadu.

## Abstract:

Cerebral palsy is a disorder of movement, muscle tone and posture. Cerebral palsy is due to abnormal brain development often before birth. Cerebral palsy is the most common physical disability in children; about 2 per 1000 live-born are later diagnosed with CP. Social inequality in risk has been reported for outcomes strongly associated with CP, including preterm birth, low birth weight and intrauterine growth restriction. In medical world, there are a lot of newly developed technologies are present in children health for pediatric care. Therefore several generations before in *Siddha* literatures are described the child growth, child growing period and the specific group of medicinal plants suitable for pediatric population and the diseases that occur in various stages of childhood and their treatment. In *Siddha* literature, most of the symptoms of Cerebral Palsy are correlated to *Siravatham*, *Sirasthamba Vatham*. I reviewed a complete manual on siddha treatment for cerebral palsy. The external therapies are like *Varmam*, *Podithimirthal*, *Ennaiooral (Sira Pootchu)*, *Ennaiozhukku (Tharai)*, *Thokanam*, *Nasiyam*. One of the concepts of *Siddha* system is diseases are raised from impairment of *Mukkutram (Vatham, Pitham and Kabam)*. These external therapies were found to reduce *Vadha* and *Kabha* and induce *Pitha*. So that the above therapies are used to reduce the symptoms and manage the condition.

**Keywords:** Cerebral Palsy, Siddha Medicines, External Therapies.

## INTRODUCTION:

Cerebral palsy refers to permanent non progressive and occasionally evolving disorders of tone, movements or posture caused by an insult to the developing brain <sup>[1]</sup>. Cerebral palsy is a group of posture and movement disorders due to nonprogressive lesion of the infant or fetal brain. It is the most common chronic motor disability in childhood affecting 2-3 infants per 1000 live births. Children with multiple disabilities associated with impairments of sensory, motor, physical, socio emotional, behaviour and cognitive domains known as “Cerebral palsy”. There are many physical activity of motor system that can affect children. But cerebral palsy is the most common mental disability in childhood.

**CAUSES:** Most common cause is perinatal asphyxia.

**GENETIC/PRENATAL:** Structural malformations of nervous system, congenital or intrauterine infection, maternal or obstetric complications, Teratogens.

**PERINATAL:** Birth asphyxia, prematurity: low birth weight, Birth trauma, intra cranial hemorrhage, Hyperbilirubinemia, hypoglycemia, central nervous system infections.

**POSTNATAL:** Central nervous system infections, Hypoxia, Trauma, Toxins.

**CLINICAL FEATURES:** Intellectual disability, microcephaly, seizures, behavioural changes, difficulty in speech, language, swallowing, feeding, squint, malnutrition, sleep disturbances, excessive drooling.

### **MATERIALS AND METHODS:**

According to their mode of application the *Siddha medicine* could be categorized into two classes:

1. Internal medicine
2. External medicine.

### **INTERNALMEDICINE:**

Internal medicine was used through the oral route and further classified in to 32 categories based on their form, methods of preparation, shelf life, etc. In cerebral palsy the following formulation are used.

### **CHURANAM (Medicinal powder):**

*Churanam* is defined as fine medicinal powder in which the dry drugs from plant parts, animal parts and minerals are separately powdered by pounding and mixed as per defined ratio. Here we use following *Churanam* for cerebral palsy.

1. Amukra chooranam
2. Elathy chooranam
3. Thirikadugu chooranam

### **PARPAM (Medicinal ash):**

*Parpam* is an ash medicine or calx which is generally prepared after purification and trituration and grinding with herbal extracts. The grinded matter is made into coin like pill (*villai*) and then calcinated (*pudamiduthal*) using cow dung (*varatti*). Here we use the following *Parpam* for cerebral palsy.

1. Muthu parpam
2. Sangu parpam
3. Aya parpam
4. Muthuchippi parpam

### **CHENDURAM (Red inorganic powder):**

*Chenduram* medicine is defined as red inorganic powder obtained by grinding with specific liquids or frying or gentle heating or burning or calcinating or exposing to sunlight. The following *Chendurams* are used for cerebral palsy.

1. Aya chendhooram
2. Arumuga chendhooram

**ENNAI (Medicinal oil):**

*Ennai* is medicated oil obtained by imparting the fat soluble active ingredients to oils by the processes of grinding, pounding, boiling, heating, extraction etc and then filtered at certain consistency. Here we use the following medicine for cerebral palsy.

1. Anda thylam

**EXTERNAL THERAPIES:**

*Siddha* external therapies act as a powerful means to promote health equity, evidence of instant efficacy and safety and comparative cost-effectiveness<sup>[2][3]</sup>. The following therapies are to do for cerebral palsy.

1. Varmam
2. Podithimirthal
3. Thokkanam
4. Ennai ozhuku (Tharai)
5. Ennai ooral (sira pootchu)

**VARMAM:**

*Varmam* is a siddha science that aims to fulfill the cultural, spiritual and medical needs of humanity. Life energy circulates human body in three forms like *Vatham*, *Pitham*, *Kabam*. The dwelling or resting places of life energy are called *Varmam* points. *Varmam* treatment is an external therapy in *Siddha* System of Medicine. It's purely anatomical and is introduced by *Siddhars* for the human's wellbeing. Specific anatomical complex parts of the body are stimulated in *Varmam* treatment. These points are manipulated over superficial nerves, vessels, bony prominence, soft tissues, or their junctions<sup>[4]</sup>.

**PODITHIMIRTHAL (Powder massage):**

Podithimirthal is defined as a method which dry herbal powder is applied over the affected skin or all over the body then out gently after some time by rolling method. Here we use *Kollu* (*Dolichosbiflorus*), *pachai karpooram*, *manjal* (*Curcuma longum*) powder for powder massage. It will improve blood circulation and reduce the stiffness.

**THOKKANAM (Massage manipulation):**

*Puramaruthuvam thokkanam* is one of the ancient therapies for getting relief from body pain and neuro muscular diseases. It is also called as *Marthanam* by *Siddhar Therayar*. It is an excellent therapy to treat *Vali* (*Vaadha*) humour aggravating diseases as explained by *Therayar* in his book *Tharu*. *Thokkanam* improves muscles tone and strength. Periodical *thokkanam* the affected areas relieve all the *Vali* (*Vaadha*) disease and restore the normal health of immobilised persons. Here we use *Sitramutti thylam* do *thokkanam* for cerebral palsy.

1. Vida mutti thylam
2. Sitramutti thylam
3. Sadamanjil thylam

**ENNAI OZHUKKU (Tharai):**

*Ennai ozhuku* is a therapy that involves gently pouring liquids over the forehead. The name *ennai ozhuku* means *ennai* is (oil or liquid) and *ozhuku* is (flow or dripping of oil). The liquids used in *ennai*

*ozhuku* depend on what is being treated, but can include oil, milk, buttermilk, coconut water, or even plain water. This treatment drips warm oil in a steady stream on the forehead, particularly on the brow in the region between the eyes <sup>[5]</sup>. The eyes will be covered with a lightweight barrier for protection. The whole process generally lasts anywhere from 30 to 90 minutes. It might involve a massage before or after the treatment.

1. Vilva pazha thylam
2. Sandhanadhi thylam
3. Shirabala thylam
4. Chukku thylam

### DISCUSSION:

Cerebral palsy is symptomatically co related with *Sirakamba Vadham* in *Pothu Maruthuvam* <sup>[6]</sup> and *Sira Vadham* in *Madhalai Noi Maruthuvam Part 3* <sup>[7]</sup>. In *Siddha* system the way of treatment is based on balancing *Trithodas*. In this condition *Vadha & Kabha* are mainly affected. Hence we selected the above medicines to regulate the *Trithodas*. Internal medicine here we use *Amukkara chooranam* which act as a nerve stimulator. *Elathy chooranam* and *Thirikadugu chooranam* are balance *Pitha* and regulate the digestion. *Muthu parpam* will enhances brain development. *Muthu chippi parpam* have nacre paly saccharide which is act against the scopalamine induced brain impairment. *Varmam* is one the external therapies which helps to stimulate the nerves. *Nasiyam* will neutralize *Vadha, Pitha and Kabha*. *Ennai ozhukku* will reduces *Kabha* and enhance the brain activity. Internal medicines are act as nerve stimulators and neutralise *Tridhodas*.

### CONCLUSION:

Children with Cerebral palsy have multiple symptoms for which no curative treatment exists. Manipulative and body based methods such as *Varmam, Podithimirthal, Ennai ooral (Sira Pootchu), Ennai ozhukku (Tharai), Thokanam, Nasiyam* improve the quality of life of Cerebral palsy children. Here I conclude that the above therapies are used to reduce the symptoms and manage the condition.

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