

**ROLE OF SHASHTIKA SHALI PINDA SWEDANA IN CHILD CEREBRAL PALSY: A
CRITICAL REVIEW**Dr. Rishu Sharma*¹ and Dr. Gyanendra Datta Shukla²¹M.D. Scholar, Department of Panchkarma, Rishikul Campus, U.A.U, Haridwar.²Associate Professor, Department of Panchkarma, Rishikul Campus, U.A.U, Haridwar.***Corresponding Author: Dr. Rishu Sharma**

M.D. Scholar, Department of Panchkarma, Rishikul Campus, U.A.U, Haridwar.

Article Received on 04/08/2018

Article Revised on 25/08/2018

Article Accepted on 16/09/2018

ABSTRACT

Childhood period is the foundation of the life and it is here that seeds for healthy life are laid down. Disabled children are of great concern to family as well as the society. Cerebral Palsy (CP) is the leading cause of chronic disability in children, making them socially apart. According to WHO approximation, in India estimated incidence of Cerebral Palsy is around 3 per 1000 live births. CP is the manifestation of intrauterine pathologies, intrapartum complications, and the postnatal sequel, especially among preterm neonates. A double hit model theory is proposed suggesting that an intrauterine condition along with intrapartum or postnatal insult lead to the development of CP. *Swedana* (fomentation) is defined as the process by which the sweat or perspiration is produced in the body by using various methods. Inducing perspiration by using heated round *Pinda* (bolus) of special rice i.e. *Shashtika Shali* prepared in milk and processed with herbal decoction is referred as *Shashtika Shali Pinda Sweda*. This belongs to the category of *Agni sweda* as well as *Snigdha sweda*. A *pinda* (bolus) made up of *Shashtika Shali* (a type of rice harvested in 60 days) prepared in milk processed with herbal decoction is tied in bolus to rub against the whole body or afflicted part of the body so as to provide heat, nutrition and strength to the pain afflicted joints, muscles or body parts. *Shashtika Shali pinda Swedana* is found to be effective against various symptom of CP.

KEYWORDS: Cerebral Palsy, Swedana, Shashtika Shali Pinda Swedana, Agni sweda, Snigdha sweda.**INTRODUCTION**

Cerebral palsy (CP) is the most common motor disability in childhood.^[1] CP is a heterogeneous group of clinical syndromes that describe permanent disorders of movement and posture. It is characterized by abnormal muscle tone, posture, and movement, thereby limiting the activity of the affected person. The motor disorders of CP are often accompanied by disturbances of sensation, perception, cognition, communication and behavior, epilepsy, and secondary musculoskeletal problems.^[2] The Australian Cerebral Palsy Register, including information from 1993 to 2006 reported an overall CP prevalence of 2.1 per 1,000 live births with high prevalence in multiples (7 per 1,000 live births) and in extremely low birth weight neonates (e.g., for birth weight <1,000 gm, the prevalence was 50 per 1,000 live births).^[3] Cerebral palsy can be derived from any event that will affect the fetal and neonatal developing brain. Indeed, congenital malformations, fetal growth restriction, multiple gestations, infection during the fetal and neonatal period, birth asphyxia, preterm delivery, untreated maternal hypothyroidism, perinatal stroke, and thrombophilia were all recognized as risk factors for CP.^[4-7] Cerebral palsy affects the messages sent between

the brain and muscles in the body. There are three types of cerebral palsy:

1. Spastic
2. Athetoid (or dyskinetic)
3. Ataxic

In general, these three types relate to the part of the brain that has been damaged or affected. The effects of cerebral palsy vary enormously from one person to another, with some people experiencing a combination of two or more types.

Physiotherapy is accepted worldwide as a rehabilitation procedure. The treatments available are sophisticated and highly expensive which are out of reach from low income groups and so parents accept their child with locomotors disability without attempting to improve the condition.^[8]

The therapy in which perspiration is induced is known as Swedana. The procedure that alleviates the Stambha (Stiffness) of the body, relieves sense of Guruta

(Heaviness) and cures Sheeta (feeling of Cold) is called as swedana.^[9] It liquefies the vitiated Dosha and directs those towards Koshtha. The word swedana is derived from the Sanskrit root word 'swid' meaning "to sweat, perspire; foment; soften". The word *Sweda* refers to the "internal excreta of the body" which is a byproduct of *meda* or fat tissue.^[10]

Swedana has been classified into many considering the method of application, materials used, consumption of heat in the process. There are about 13 types of *Saagni* (heat source fomentation) and 10 types of *Niragni Sweda* (without heat source fomentation). In some pathological conditions both forms of *Ruksha* and *Snigdha Sweda* can be skillfully combined as and when required. In conditions where pain and associated symptoms are due to *Ama* (metabolic toxins), *Meda* (contaminated or accumulated fat or *Kapha*) *Ruksha Sweda* or dry fomentation is generally preferred. In conditions where pain and related symptoms are due to vitiation of only morbid *Vata*, *Snigdha Swedana* (wet or unctuous fomentation) is preferred.^[11]

Shashtika Shali Pinda Sweda is a kind of *Sankara Sweda*.^[12] which comes under the category of *Saagni Sweda* with *Snigdha Dravya* as *Ksheera* and *Shaali Dhanya*.

Preparation of Pottali/Pinda

In this therapy, different medicinal materials are required for preparation of *Shashtika Shali Pinda* such as materials for *Kwatha*, *Shashtika Shali* (special variety of rice), cow milk, pieces of cloth and other necessary items for cooking of *Kwatha*. *Bala moola* is chosen for preparation of *Kwatha*. Of the prepared *Kwatha*; in half of the *Kwatha*, Cow milk is added along with *Shashtika Shali* rice and cooked properly and two *pinda* of cooked rice are prepared. The other half part of *Kwatha* is mixed with some cow milk and used as *Bala moola Kwatha* during procedure.

Method of administration

Abhyanga should be performed with prescribed *Taila* for about 15 to 35 minutes before the main procedure. The prepared *Pottali* are taken and dipped in the mixture of *Bala moola Kwatha* and cow milk which is simultaneously boiled. This *Pottali* is rubbed and squeezed mildly on the patient. This is done in 7 postures (2 to 5 Min in each posture). After the procedure is completed the *Shashtika* is scrapped from the body and *Taila* applied over the body with mild massage.

After the *Shashtika Shali Pinda Sweda* treatment, Patient should be advised to take lukewarm water bath. The total duration of the procedure may vary from 45 to 90minutes. The procedure is normally performed for 7 to 21 days according to the condition of the patient and may vary according to the condition of the diseased.

Shashtika Shali Pinda Sweda will help to improve circulation, nourishment to the body. It also improves the strength of the tissues of bones and muscles.

DISCUSSION

The medicated oil used in *abhyanga* helps in preventing muscular atrophy and improving tone. Generally, *Bala Taila* is applied for *abhyanga*. *Bala* is *Vatashamaka* and *Balya* thus provides nutrition to the muscular tissue and thereby preventing atrophy of muscles. Also the *taila* possess *Snigdha guna* by virtue of which it performs *snehana*, *kledana* and *vishyandana* of body at cellular level. Also, *abhyanga* causes reduction of tone in muscles, which are in a state of excess tension. Stretching of tight fascia and restoration of mobility of soft tissues also occurs.

Relief of pain is obtained by releasing acute or chronic tension in muscles and by affecting pressure and touch nerve endings.

The procedure of *Shashtika Shali Pinda Swedana* not only provides heat but also medicine. Fomentation makes the skin more permeable by opening the skin appendage through Sweating, dilating blood vessels, and helps in absorption of medicine. Superficial layer of skin is generally impermeable to most of the things. Phospholipids are present in milk, which is an important component of cell membrane. Its amphipathic nature helps in absorption of medicine. It pacifies the morbidity of *Vata*, *Pitta* and *Rakta* in the skin, afflicted joints muscles and soft tissues. It also improves the movement of joints and enhances the flexibility of the body, soothes the nerves and improves blood circulation.

Also, **Vyas, A. G et al** studied Etiopathological study in Cerebral Palsy and its management by *Shashtika Shali Pinda Sweda* and *Samvardhana Ghrita*.^[13] The study was carried out in 16 patients, 8 in each group, namely group A (*Shashtika Shali Pinda Sweda* externally and *Samvardhana Ghrita* internally) and group B (*Samvardhana Ghrita* internally) for 35 days duration. Group A showed better results in improving motor system skills by improving muscle power, and reducing hypertonia and tendon reflexes. This shows a comparatively more beneficial outcome of the *Shashtika Shali Pinda Sweda* procedure regarding improving motor system components. Major impairment of motor system is occurring in Cerebral Palsy.

Thus, *Shashtika Shali Pinda Swedana* proves to be an effective treatment modality in case of child Cerebral Palsy.

CONCLUSION

Shashtika Shali Pinda Sweda is one of the treatments in *Ayurveda* which helps in enhancing strength, immunity, and nutrition to the tissues, to prevent degeneration and inflammation.

The effect of Shashtika Shali Pinda Swedana is helpful in reducing the spasticity, joint deformities and prevention of contractures and thus improving muscle tone, gain in muscle strength & proper nourishment of dhatus.

REFERENCES

1. Accardo P, Accardo J, Capute A. A neurodevelopmental perspective on the continuum of developmental disabilities. 3rd ed In: Accardo P, editor, editor. Capute & Accardo's Neurodevelopmental Disabilities in Infancy and Childhood. Baltimore, MD: Brookes, 2007; 3–26.
2. Rosenbaum P, Paneth N, Leviton A, Goldstein M, Bax M, Damiano D, et al. A report: the definition and classification of cerebral palsy. *Dev Med Child Neurol Suppl*, 2007; 109(April): 8–14. [PubMed].
3. Smithers-Sheedy H, McIntyre S, Gibson C, Meehan E, Scott H, Goldsmith S, et al. A special supplement: findings from the Australian Cerebral Palsy Register, birth years 1993 to 2006. *Dev Med Child Neurol*, 2016; 58(Suppl 2): 5–10. 10.1111/dmcn.13026 [PubMed] [Cross Ref].
4. Nelson KB, Ellenberg JH. Antecedents of cerebral palsy. Multivariate analysis of risk. *N Engl J Med*, 1986; 315(2): 81–6. 10.1056/NEJM198607103150202 [PubMed] [Cross Ref].
5. Blair E, Stanley F. When can cerebral palsy be prevented? The generation of causal hypotheses by multivariate analysis of a case-control study. *Paediatr Perinat Epidemiol*, 1993; 7(3): 272–301. 10.1111/j.1365-3016.1993.tb00405.x [PubMed] [Cross Ref].
6. Grether JK, Nelson KB. Maternal infection and cerebral palsy in infants of normal birth weight. *JAMA*, 1997; 278(3): 207–11. 10.1001/jama.278.3.207 [PubMed] [Cross Ref].
7. Hankins GDV, Speer M. Defining the pathogenesis and pathophysiology of neonatal encephalopathy and cerebral palsy. *Obstet Gynecol*, 2003; 102(3): 628. 36.10.1097/00006250-200309000-00036 [PubMed] [Cross Ref].
8. Rahul Ghuse, et.al. Shashtika Shali Pinda Sweda in the Management of Child Cerebral Palsy Spasticity, *Joinsysmed*, 3(1): 23-29.
9. (CS Su.22/11).
10. (CS Ci.15/18).
11. <http://saepub.com/article/Review%20on%20Nutritive%20Ayurveda%20Bolus%20Fomentation:%20Shasthikashali%20Pinda%20Swedana/>.
12. Charaka Samhita of Agnivesha, revised by Charaka and Dhridhabala with Ayurveda-Dipika Commentary by Chakrapanidatta and with Vidyotini hindi commentary by pt. Kashinath Shastri, edited by Dr. Gangasahaya Pandey, Varanasi, Chaukhamba Sanskrit Academy, reprint edition, part 1, Sutra Sthana 14/41, 2012; 203.
13. <https://www.ncbi.nlm.nih.gov/pubmed/24049406>.