



CRITICAL ANALYSIS OF BASTI KARMA IN THE MANAGEMENT OF CEREBRAL PALSY – A CASE STUDY

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ABSTRACT

Cerebral palsy is the most common cause of crippling in children these days. It results from damage to the growing brain. The prevalence of CP in children remains at 2-2.5/1000 live births in India. A specialised branch of Ayurveda known as **Kaumarbhritya** deals with the child health care and management of these disorders in children. *Cerebral palsy* cannot be correlated with any single disease condition in Ayurveda, it can be compared with **Shiromarmaabhigataj Vat Vyadhis** as far as its etiology and symptoms are concerned. Though CP cannot be cured completely but the quality of life as well as the dependency of the child can be reduced with suitable treatment. Here an effort was made to treat a 2 year old male child with CP using multiple Ayurveda modalities. At the end of 30 days with the use of *Kshirbalatail basti* a remarkable improvement in the overall effect of therapy was seen. *Basti karma* is described as *Amrit(nectar)* by acharya *Kashyap* that can be given in all ages. *Vata dosha* is the principle cause for a number of diseases therefore there is no other cure for the relieve of that increased *Vatadosha* except for *Basti* that's why learned vaidyas consider *basti* as *Ardha chikitsa* while some call it as *Sampurna Chikitsa* or complete treatment for the eradication of increased *Vata dosha*. *Basti karma in paediatrics* is the most useful therapy that works rightly in overall progression and advancement of child Therefore with the help of this paper the scientific evaluation and critical analysis with proper management of CP through *basti* in a *paediatric* case has been mentioned.

KEYWORDS: Basti, paediatric, cerebral palsy, Ayurveda, treatment.

INTRODUCTION

शिशूनामशिशूनां च वस्तिकर्माभ्यं यथा । शिष्यामर्षयशसी शिशोरायुः प्रजां पितुः ॥

त्रयमेकपदे हन्ति शेषजं दुरनुष्ठितम् । तस्मादापन्नरोगेषु बालप्रायेषु देहेषु ॥

(का. सि. 1/9-10)

- *Basti* takes over the entire body of humans from the ends of their hairs to the tips of their Nails.^[1]
- *Vata dosha* is the principle cause of a number of diseases therefore there is no other cure for the relieve of that increased *Vatadosha* except for *Basti*.^[2]
- Learned vaidyas consider *Basti* as **Ardha chikitsa** while some Vaidyas consider *basti* as **Sampurna Chikitsa**.^[3]

Cerebral palsy

- Cerebral palsy is a non progressive non fatal non curable neurological disorder that results from the damage to the growing brain.
- It is the most common cause of crippling in children

these days

- Causes could be natal, antenatal postnatal.
- It can be correlated with *Vata Vyadhis* in Ayurveda.
- Cerebral Palsy can be considered as *Janma Bala Pravritta Vyadhi* (congenital disorder). It can also be caused due to *Doshas* (bodily humors). It can be considered as *Shiro Marmabhigata Vata Vyadhi* (diseases caused due to injury to head).
- The motor disorder of cerebral palsy are often accompanied by disturbances of sensation, perception, cognition, communication and behavior: The incidence of cerebral palsy in India 2- 2.5/1000 live births among which 77.4% of the children are identified to be suffering with cerebral palsy.^[4]

Case Report – Basic information of the patient

Name - Indranil Deshmukh
Age. - 3 years
Sex. - Male
Religion - Hindu
DOB - 11/09/20

Date of Admission – 03/01/23
Place - Karanja lad, washim

Respiration - clear
G. C.- clear
Pulse rate - 76/min
Temperature - Afebrile

Chief Complaints

Developmental delay
Sit with support (in 1 year)
Stand with support (in 2.5 years)
Salivation
Lack of activities

Ashtavidh Pariksha

Nadi - *Vatakaphaj*
Maala - *prakrut*(normal)
Mootra - *prakrut*(normal)
Jeevha - *saam* (tongue coated)
Speech - *Ashpashtam Swaram* (reduced clarity)
Sparsh - *anushnashit* (neither hot nor too cold In Touch)
Aakruti - *krush* (lean build)
Druka - *ishat avyaktam*(poor vision)

History of Present Illness

- Born through normal vaginal delivery
 - Did not cry soon after birth
 - Weight at birth – 3.5 kg
 - Was kept under observation in NICU for 10 days
- MRI impression – bilateral cerebral hemiplegia

Examination

Developmental milestones of the child

Milestone	Attained at	Normal
Neck holding	6months	3months
Sitting with support	1year	5months
Sitting without support	14months	8months
Standing with support	2.5 years	9months
BI dextrous grasp	10 month	5 month
Reaches for object	12months	7months
Turns head towards sound	4months	1month
Monosyllables	18months	6months
Social smile	5months	2months
Recognizes mother	9months	3months
Bysyllables	2 years	9month

Treatment Protocol

Purvakarma for first 15 days

- *Snehan* – Sarvang abhyang with Dhanwantar tail for 20min
- *Swedan* – Shashtik Shali pinda swed for 20min.^[5]

Pradhan karma for the next 15 days

- Basti a) *kshirbalatail* Basti started with 10 ml and then then dose ncreased to 15 ml seeing the *Samyak lakshanas* in the child
- b). Given alternately in 15 days (as per Kashyap reference)
- c) Initially 2 bastis of 10 ml
- d) Remaining 6 bastis of 15 ml

Kshirbalatail Basti

- Bala is a highly valuable drug in Ayurveda and one amongst the three most utilized raw drugs. Root of Bala (*sida cordifolia*) is the major ingredient of an Ayurvedic drug *Ksheerbalataila* used for the treatment of neurological disorders in Ayurveda. The *bhaishajya kalpana vinyan* has various formulas for Preparation of medicines.^[6]
- One of the most popular and important oil formulations in Ayurveda is “*ksheerabala Taila*” (oil) known for its effectiveness in various diseases such as cerebral palsy and other neurological disorders.

- *Ksheerabala Taila* was first mentioned in *Sahasrayogam* and similar formulations has been mentioned in other classical Ayurveda texts with some different names
- *Sushruta* mentioned it as *Bala Taila* and *Shata Paka Bala Taila* [*Sushruta Samhita, Chikitsasthana, chapter 15, verse 40-43*]
- In *Ashtanga Hridaya* and *Bhavaprakasha 4* it is mentioned as *Shata Paka- Sahasra Paka Bala Taila*. *Chakradutta, Vangasena* (mentioned *Dashapaka Bala Taila, Shata Paka-Shasra Paka Bala Taila*) and *Gadanigrah* quoted it as *Dashapaka Bala Taila*. National Ayurvedic formulary of India and pharmacopeia standards of Ayurvedic formulations have adopted the formula of Charaka and named as *Ksheerabala Taila*.

METHOD OF PREPARATION OF SHATAPAKA AND SAHASRAPAKA BALA TAILA IN CHARAKA SAMHITA AND ASTANGA HRIDAYA
Paste is prepared from 960 g of Bala Moola powder. Then, a decoction of Bala Moola is prepared by taking 61.44 kg water and reduce to ¼” i.e. 15.36 kg. 960 g sesame oil and 960 g of cow milk is added to the mixture. The mixture is heated on simmer until oil remains and water gets evaporated. The mixture is allowed to cool and filtered to obtain *Ksheerabala Taila*.

This process is repeated for 100 times and 1000 times to get Shata Paku Bala Taila and Sahasra Paka Bala Taila respectively.^[7]

PROPERTIES OF MAIN INGREDIENTS OF KSHEERABALA TAILA

• *GO-KSHEERA*

Go-Ksheera (cow milk) contains all the elements necessary for the growth and nutrition of bones, nerves, muscles and other tissues of the human body. It is Madhura in taste, Snigdha, Guru Guna property, Sheeta Veerya and Madhura Vipaka. It alleviates Vata Dosha. It is Jivaniya, Brimhaniya, Sthanya Vardhaka, Balya. Snehaniya, Dahanashaka, Ojovardhaka, Vishanasaka, Sukrajanaka, Agnidepaka, Ayurvedhaka, Medavardhaka, Rasayana, Mridu Rechaka, Abhisyanda Karaka.

• *BALA*

Bala is a highly valuable drug in Ayurveda and the fact that it is one amongst the three most utilized raw drugs by Ayurvedic pharmaceuticals. Presently many species of Sida are recognized as Bala throughout the country. Sida cordifolia Linn. Is proposed as source plant in Ayurvedic Formulary of India". Bala, as the name itself suggests a drug providing energy or strength. It is abundantly mentioned in Ayurveda and has been largely used in neurological as well as heart diseases.^[8]

It Is kept among Balya Mahakashaya and Madhura Skandha [Charaka Samhita, Vimana Sthana, 8, verse 139] by Charaka. Sushruta has kept it among Vatashamaka Gana, hence it is best for promoting strength and alleviating Vata. The root possesses Madhura Rasa, Guru, Snigdha Guna, Sheeta Veerya and Vipaka. It is Balya, Rasayana, Brimhaniya, Oojavardhaka, Raktapitahara, Vrishya, Vatahara, Kshayanashaka, Prajastapana, Grahi. It is useful in neurological disorders.

• *TIL TAIL*

Sesame oil is used as a base for oil preparation". Tila Taila is Madhura Rasa and Vipaka, Balya and Rasayana in Karma; it nourishes and strengthens all Dhatu, checks Dhatukshaya and thus alleviates Vata. Snigdha and Guru Guna decreases Rukshata of Vata and with the help of Ushna Guna and veerya.^[9]

On the basis of total number of basti administered types of basti include

- Karma Basti – Total 30 Basti administered in Which there are 18 Anuvasana and 12 Niruha Basti.
- Kala Basti – According to Charakacharya it is the half of Karma Basti. Chakrapani opines that it includes sixteen Basti out of which 10 Anuvasana and 6 are Niruha. According to Acharya Vagbhat it include 15 Basti, out of which 6 are Niruha and 9 are Anuvasana. According to Kashayap 12 Anuvasana and 3 Niruha, alternate in beginning 1 Niruha & 3 Anuvasana and at last 3 Anuvasana.

- Yoga Basti Total 8 Basti 5 Anuvasan and 3 Niruha.^[10]

TYPES OF BASTI

- Niruha Basti- It is also known as Asthapanbasti. In honey, salt, ghee is administered. Decoction enema which is mixed with this type of basti
- Anuvasan basti- it is also known as *sneha* basti. In this type ghee, oil, fats, hegaloids are administered.

MATERIALS

BastiNetra (noozle) It should be made from metals like gold, silver, wood, bones, bamboo.

Gopuchhakara-corelating with shape of cow's tail.^[11]

Achidra-without holes(except at two ends.)

- Smooth and straight.

Gulikamukha-tip should be like a pill.

LENGTH OF NOZZLE

For children less than 1 year- 5 angula (7.5cm)

1-7 years- 6 angula(9cm) 7years- 7angula(10.5cm) 12 years- 8 angula (12cm) 16 years-9 angula (13.5cm) 20 years onwards-12 angulas (18cm)^[12]

METHODS

Basti karma consist of 3 parts

- Purvakarma- Snehan and Swedan
- Basti karma
- Sansarjan karma

SNEHAN

Snehan is a purvakarma done before starting any of the panchkarmas. It is the process of doing oleation of the body Internally and externally using medicated Oils, ghee, vasa, majja.

SWEDAN

Swedan is done after snehan. It is a process Where sweating is induced artificially. It relieves heaviness, stiffness, coldness of body. Maharshikashyap has defined 8 types of swedan in Children. hastswed and pat swed can be given to infants and neonates. Othersweds are Nadiswed, Prastharswed, Sankaraswed, Prad Ehaswed, Upnahaswed, Avgahswed, Paris Ekswed.

Procedure

Patient is told to lie down in left lateral position. small amount of oil is applied to anus and bastineta(nozzle) bastineta is Introduced into anal canal upto specific length, then bastiputak which contains bastidravya is pressed uniformly pressure is applied till small amount of bastidravya is left in bastiputak to avoid insertion of air. Then baastineta is removed and patient Is advised to lie in supine position till he feels urge to excrete.^[13]

NIRUHA BASTI MATRA

Upto 1 year- 1 pala(48gm)

- Then increase by 1 pala till it becomes 12 Pala(6 prasut, 576gm)

- At 12 years- 12 pala
- After 12 years increase each year by 2 Pala(1 prasut, 96gm) till it becomes 24 palas(12 prasuta)
- At 18 years- 24 pala.
- 18-70 years- 24 pala.^[14]

AIMS AND OBJECTIVES

- To highlight the effective role of *Kshirbalatail* basti in the management of cerebral palsy.
- To improve the attributes of life as well as to reduce the dependency of child with suitable treatment.

MATERIALS AND METHODS

- Materials are the diagnosed patient of cerebral palsy attending OPD and IPD of kaumarbhritya, Vidarbha Ayurved Mahavidyalaya Amravati was taken for research work. *Kshirbalatail* is one of the *Sneha Kalpana* (oil preparation) prepared using *Kshir*(cow's milk), *bala Sida cordifolia*., and *til tail* sesame.
- *Kshirbalatail basti* was given after *Snehan* and *Swedan* In the whole process of analysis.
- Searches were made, for papers published by using key word *Ksheerbalatail* and different uses of *ksheerbalatail*.

OBSERVATION AND RESULTS

After 1st setting – Started making sounds Recognizes sound

After 2 - 3 setting – used to crawl back and forth, Started to sit without support

After 4 – 5 settings – sit without support for longer time (30minutes)

After 6 -7 settings -- tries to stand holding on to a support

After 8th setting --tries to stand without support for 10 seconds Started to speak monosyllables and bisyllables.

DISCUSSION

- The *snehan* therapy works as *Vatkaphashamak*, it nourishes the body thereby enhancing physical stability.
- The *swedan* therapy helps in removal of *doshas* from the body. These *doshas* have become moist by lubricant and have got liquified by sudation.
- Basti directly works on *vata dosha* bringing it back to normal, purifies the body by removing toxins also helps in internal nourishment of the body
- The action of *ksheerbalataila* could be analyzed according to the *rasa panchaka* of its ingredients. All the three ingredients having *madhur* *rasa* and *vipaka*, which is *vata* and *pittashamaka*, gives strength to Tissues and is good for sense organs and pleasing to mind
- Basti with *ksheerbalataila* shows positive result in cerebral palsy. *Ksheerbalataila* provides *Snehana* and *brumhana* in the body. It nourishes *Kapha* by the action of *snehana* which helps to subside *ruksha*, *khara gunas* of morbid *vata dosha*.

- Basti is considered as *Ardhachikitsa*. and since medicaments can directly reach the blood circulation as rectum has rich blood supply, the substances can be directly absorbed into portal circulation. And it is indicated to be used in very young and very old age also.” As the child's age was very young *Shodhana* Basti was planned in alternate sittings.

CONCLUSION

- Management here has been done exclusively using Ayurveda medicines, appropriate *Panchakarma* procedures and supportive therapies.
- A remarkable improvement in the overall activities of the child within the first few days of basti were seen.
- Developmental delay and lack of activities and functions may be due to problem in normal function of *Vata* hence Basti was found effective to fix this increased *Vata dosha* to normalcy.
- Though CP is not cured completely but the suitable treatment helped improve the quality of life thereby minimizing the dependency.

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