



MANAGEMENT OF SPASTIC CEREBRAL PALSY THROUGH MASHA TAILA MATRA BASTI

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ABSTRACT

INTRODUCTION

Cerebral palsy (CP) is a group of permanent movement disorders that appear in early childhood¹. Wallerian degeneration is one of the major pathologies in spastic cerebral palsy. The cause of cerebral palsy (CP) and its effect on function vary from person to person. Wallerian degeneration is a series of cellular and molecular events that occur after a nerve is injured and the distal segment of an axon is separated from its cell body². Cerebral palsy (CP) is the leading cause of childhood disability affecting function and development³. Population based studies around the world reports prevalence incident of CP ranging from 1.5 to 4 per 1000 live birth⁴. Cerebral palsy is caused by damaged or abnormal development in the parts of the brain that control movement, balance and posture⁵. Symptom of cerebral palsy can vary greatly, as it is a multi-factorial disease with clinical features of a wide variation, it cannot be correlated with any single disease or condition in Ayurveda. According to Vagabhatta, it can be classified in the disease categories of sahaja (hereditary) and garbhaja (congenital) type of diseases. It can be taken as Vata Vyadhi as far as its aetiology and symptomatology are concerned.

Aim

To assess the effect of matra vasti with masha taila in the management of cerebral palsy.

Materials and Methods

A 4-year-old male child with spastic type of cerebral atrophy due to Wallerian degeneration came to OPD of GAM, Puri. Patient was treated with Sarvanga abhyanga with Masha Taila followed by sarvanga swedana with Dashamoola Kwatha and then with matra vasti with Masha Taila for 10 days. The same course of treatment has been repeated for 3 times with an interval of 15 days. Results of treatment were assessed with anthropometrical measurement, Modified Ashworth Scale, muscle power grading along with motor and sensory symptoms.

Chief Complaints

Patient was came to us presenting with unable to walk without support along with stiffness, loss of joint movement, weakness and increased tone of muscles in his right half of body. He was also complained of slurred Speech and impaired short-term memories.

History of Present Illness

Patient was delivered by lower segment caesarean section (LSCS) at full term and did not cry soon after birth and also suffered from birth asphyxia and neonatal jaundice. Due to all of these clinical complications, the child could not achieve normal growth and development. Spasticity and restriction of movements in right upper limb with delayed milestones became apparent after the age of 5 months.

History of Past Illness

Birth asphyxia, Neonatal jaundice

Treatment History

The child was being given tablet Baclofen (as a muscle relaxant) intermittently. He was undergoing physiotherapy for 1 year.

Family History

No family history and consanguinity found

**Birth History**

Antenatal: Normal

Natal: Full term LSCS (due to breech presentation and primiparity of mother) was done.

Baby did not cry soon after birth. Birth weight was 2.5 kg. Postnatal: Birth asphyxia, neonatal jaundice.

History of immunization: he was administered with proper immunisation schedule.

General Examination

Patient vitals were within the normal range. There was no deformities found in Cardiovascular and respiratory examinations.

Sl no.	Dashavidha Pariksha	Observations
1	Prakriti	Vatakapha
2	Vikriti	Pravara
3	Sara	Tvak
4	Samhanana	Avara
5	Desha	Jangala
6	Kala	Greeshma
7	Aharasakti	Madhyama
8	Vyayamashakti	Avara
9	Vaya	Vala
10	Bala	Avara

Sl. No.	Asthavidha Pariksha	Observations
1	Nadi	Vatakapha
2	Mutra	Normal
3	Mala	Apakwa
4	Jihva	Samaja
5	Savda	Normal
6	Sparsha	Sheeta
7	Drik	Samanya
8	Akriti	Avara

Treatment given: he was treated with following treatment for 3 consecutive times with gap of 15 days then follow up was taken.

Sarvanga Abhyanga with Masha Taila for 15 days

Sarvanga Bashpa Sweda with Dashamoola Kwatha for 15 days

Matra Basti with Masha Taila for 15 days



Observation and Result

Effect of therapies on developmental milestone

a. Gross motor development (Achieved-A, Not achieved-NA, Partially achieved-PA)

Milestone	Normal time	Before treatment	After treatment	Follow up
Neck holding	3m	Present	Present	
Sitting with support	5m	Present	Present	
Sitting without support	8m	Absent	Present	
Standing with support	9m	Absent	Present	
Standing without support	12m	Absent	Present	
walking with support	12m	Absent	Present	
Walking without support	13m	Absent	Absent	
Running	18m	Absent	Absent	

b. Fine motor Development (Achieved-A, Not achieved-NA, Partially achieved-PA)

Milestone	Normal time	Before treatment	After treatment	Follow up
Graps thing when place in hands	4m	Present	Present	
Transfer object to another hand	6-9m	Present	Present	
Holding small object/pincer graps	9m	Present	Present	
Self-feed with spoon	24-30 m	Absent	Present	

c. Language (Achieved-A, Not achieved-NA, Partially achieved-PA)

Milestone	Normal time	Before treatment	After treatment	Follow up
Turns head to sound	1m	Present	Present	
Mono syllables (Ma, Ba)	6m	Present	Present	
Bi syllables (Mama, Baba)	9m	Present	Present	
Two words with meaning	12m	Present	Present	
Simple sentence	24m	Present	Present	
Tells story	30-36m	Absent	Present	
Normal speech	30-36m	Absent	Present	

d. Social Development (Achieved-A, Not achieved-NA, Partially achieved-PA)

Milestone	Normal time	Before treatment	After treatment	Follow up
Social smile	2m	Present	Present	
Recognizing mother	3m	Present	Present	
Smile at mirror	6m	Present	Present	
Displeasure when toy is taken	9m	Present	Present	
Waves 'bye-bye'	9m	Present	Present	
Plays a simple ball game	12m	Present	Present	

Effect of therapies on anthropometrical measurements

Components	Before	After	Follow up
Length	250 cm	252 cm	
Weight	15kg	17 kg	
Mid arm circumference	13 cm	15 cm	
Head Circumference	52cm	52 cm	
Chest Circumference	53 cm	53 cm	

**Effect of therapies on Motor Development**

Modified Ashworth Scale

Grade	Expalnation	Before treatment	After treatment	Follow up
0	no movement	Grade 2	Grade 3	Grade 3
1	Palpable contraction, no visible movement			
2	Movement but only with gravity eliminated			
3	Movement against gravity			
4	Movement against resistance but weaker than normal			
5	Normal power			

DISCUSSION

Vatavyadhi Chikitsa can interpret with the management of CP. Here in this case spastic type of CP was treated with Brihmana Dravyas to control Vata activities. Stambha Guna of Vata was aggravated here along with reduced general activities of this child so treatment was planned to control of Vata with Masha Taila Abhyanga and Matra Basti⁶. Taila is the best way to reduce Vata aggravation so Masha is introduced to body in the form of Taila. Sneha, Ushna and Gourava character of Taila is helping to reduce Vata Dushti⁷. Guru, Sheeta and Brimhana effect of Masha is helping to provide deteriorating effect in CP⁸. Basti is useful to treat aggravated Vata sited in Pakwashaya. Systematic effect of Basti is through its Virya means the active ingredients of Basti Dravya acts on various system by administering anal route⁹. Matra Basti can be given to any age or at any condition so by giving Masha Taila through Matra Basti might helpful to reduce Vata symptoms in cerebral palsy.

The above treatment protocol of Ayurveda shows good result in patient especially by improving growth and development, reducing spasticity of right upper limb and muscle.

CONCLUSION

Multisystem approach is needed to improve the condition of the patient. Panchakarma alone, Basti acts by medication should be given to improve all facets of spastic Condition acts by their own mode of action and can improve in such disease conditions.

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