



### Case Report

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## Management of Cerebral palsy- A case report

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### ABSTRACT

Cerebral palsy is a non progressive disorder of posture and movement. It results from a defect or lesion of the developing brain. It is of 5 types, among which spastic cerebral palsy is most frequently encountered in clinical practice. A case report of 1 ½ year old male child presented with weakness and paucity of movements in right side of the body, tightening of the joints and drooling of saliva. This condition was diagnosed as Samvardhana Vikara vis-à-vis Spastic Cerebral Palsy. The Dosha (body humor) involved in this condition is Vata and hence the Vatahara line of treatment was adopted. The main aim of this case report is to show that a timely and well planned Ayurvedic line of treatment can help a disabled and a crippling child to walk and function normally.

**Keywords:** Spastic cerebral palsy, Posture, Vata, Samvardhana Vikara.

### INTRODUCTION

Sreyasi Praja (Healthy progeny) is a dream of every parent. But physical and mental disability is the cause of concern for parents and society. Cerebral palsy is one such form of chronic motor disability which is non progressive, nonfatal and yet incurable illness. This results from damage to the growing brain before or during birth or in the postnatal period. It is the most common cause of crippling in children <sup>[1]</sup>. Nearly 15-20 % of total physically handicapped children suffers from Cerebral Palsy. The prevalence of Cerebral Palsy among children is 2-2.5 per 1000 newborns <sup>[2]</sup>. Present article is a case report of a 1½ year male child who presented with complaints like weakness and paucity of movements in right side of the body, tightening of the joints, drooling of saliva and this condition is a variant of Bala Samvardhana Vikaras(developmental disorders) and diagnosed as Spastic Cerebral palsy. Based on lakshanas, the main dosha involved in this condition was identified as Vata. Hence, line of treatment of Vata Vikara was adopted. Also as it is a variant of developmental disorder, drugs which are having properties like Medhya, Balya, Rasayana and Vakshudhikara were used to promote growth and development.

### CASE REPORT

#### Way of evolution

Parents of a 1½ year old male child approached the OPD of Kaumarabhritya, SDMCA, Udupi with complaints about their child with paucity of movements of right upper and lower limbs noted since 3 months, preferring to hold objects in the left hand than right, bearing weight more on the left leg than right, tightening of limbs at elbow and knee joint since 3 months, also parents complained of dribbling of saliva from the mouth.

A male patient of age 39 presented with pain and swelling over wrist, metacarpophalangeal and interphalangeal joints of right side. There was mild stiffness and tenderness in joints. He also had minor complaints like anorexia, nausea, constipation, heaviness in body etc.

#### Janma vruddanta (Birth history)

#### Prasavapoorva vruddanta (Ante natal history)

Patient's mother was 30 years, had Gestational Diabetes Millets and was on insulin injection.

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### Prasavakaalina vruttanta (Natal history)

Full term baby extracted through LSCS. Child had weak cry at birth with an APGAR score of 7/10 at 1min, 10/10 at 5min, Birth weight 3.1kg, length 50cm, Head Circumference 33cm.

### Prasavottara vruttanta (Post natal history)

There was H/o sepsis (thrombocytopenia and positive CRP) and neonate jaundice.

### Developmental History

Gross motor development, fine motor, language and social and adaptive mile stones were delayed.

### Kula vruttanta (Family history)

No one in the family had suffered with similar illness. There was no history of consanguineous marriage.

### Viruddhabhisamskriti (Immunization status)

Vaccinations were administered regularly as per the immunization schedule.

### Feeding history

No difficulty in feeding

### Vayaktika vruttanta (Personal history)

Aharaja: Proper food intake was present. Appetite was moderate and prefers to consume semisolid food.

Viharaja: Disturbed sleep. Not attained bowel and bladder control.

### General examination findings

The child was consciousness, well oriented to person, moderately built and moderately nourished weighing 11 kg, no signs of pallor, icterus, cyanosis, lymphadenopathy and edema. Tongue was coated and normal movements were present. The child had spastic gait.

Vitals are normal. Respiratory system, Cardiovascular system and per abdomen examinations had shown no abnormality.

### Central nervous system

Higher Mental Functions- Child was alert, well oriented to person, hallucination, delusion and illusion was absent. The speech was dysarthria.

Cranial Nerve Examination- All were intact

### Motor system examination-

Muscle power-

Right Side	BT	AT	Left side	BT	AT
Upper limb	1/5	5/5	Upper limb	5/5	5/5
Lower limb	1/5	5/5	Lower limb	5/5	5/5

BT: Before Treatment, AT: After Treatment

Muscle tone-

Right Side	BT	AT	Left side	BT	AT
Upper limb	Hypertonic	Normal	Upper limb	Normal	Normal
Lower limb	Hypertonic	Normal	Lower limb	Normal	Normal

### Reflexes

1. Deep tendon reflexes were exaggerated on right knee, ankle and biceps. It was normal on left side.
2. Superficial tendon reflex was normal on both sides.

### Locomotory system examination

#### General examination of joints-

On inspection joints were normal; Gait is painless and spastic type.

On palpation joint was non tenderness no any inflammatory changes. Stiffness was present in right side of the body.

**Spine-** No any abnormalities were detected.

**Upper limb examination** Loss of strength and reduction in the movements was present in right hand and wrist. Spasticity and reduction in the movements was present in right elbow joint and shoulder joint. Left side was normal.

**Lower limb examination** On examination of Hip joints, both were normal. There was no pelvic tilt and no apparent or true shortening of limbs. Spasticity and reduction in the movements was present in right knee joint and knee joint. Left side was normal.

### Investigations MRI Brain on 5/6/2012

**Impression** Gliotic changes secondary to previous hypoxic insult involving the left fronto-parieto-temporal lobe with volume loss and wallerian degeneration of the left cerebral peduncle.

### Sampraptighatakas

Dosha: Vata pradhana tridosha

Dushya: Rasa, rakta, mamsa, asthi, majja

Srotas: Rasavaha, raktavaha, mamsavaha, asthivaha, majjavaha

Adhistana: Shiras(mastulunga majja)

Vyakta sthana: Arda shareera

Dusti prakara: Sanga, atipravritti

Roga marga: Madyama

### Treatment modality

Treatment was planned for 7 days with various sittings on IPD basis. During which Saraswatharista with gold 3ml twice daily was given internally. Externally Abhyanga with Ashwagandhabalalakshadi Taila followed by Sastikashali pinda sweda was given. Matra basti with Prasarini taila 10 ml was given. A gap of 45 days was given between sittings, for the duration of 1 year. Then 3 months gap was given between 2 sittings, during which oral medications like Brahmi gritha 2ml twice daily with warm milk, powder combination of Kumarakalyana rasa, Amrita satwa, Vacha churna and Yasti madhu churna with a dose of 1pinch were given once daily with honey, Syp. Shankapushpi 5ml twice daily was given. Total duration of the treatment was 2 years.

### Improvement seen

The assessments were done periodically. By the combined effect of oral medications and external therapies the Vata attained normalcy thus proper development of milestones were achieved. Improvement was seen in complaints like reduction in dribbling of saliva, reduction in spasticity of joints; child started using his right hand to hold the objects, reaching towards object, exchange of things from right hand to left hand. He started informing mother when he gets urge for micturition and bowel. By the end of 2 years of treatment he was able to walk normally.

### DISCUSSION

The major aim of treatment of cerebral palsy is to achieve maximum possible functional ability and skill in keeping with his developmental age<sup>[3]</sup>. Impaired Vyana vata is responsible for the clinical features like spasticity and paucity<sup>[4]</sup>. Basti was selected to do Samprapti Vighatana as it is the best treatment to normalize Vata dosha<sup>[5]</sup> and preferred treatment modality in pediatric age group. Prasarini taila which is used for matra basti is one among the best Vatashamaka resulted in yielding better results. Abhyanga and Shastikashali pinda sweda involve cutaneous manipulation, it is considered as one of the prime procedures for mitigating vata<sup>[6, 7]</sup>. These modalities of external therapy may act by a dermal mechanism of drug absorption and action. Primarily, it acts by two mechanism viz., local and central. The local

mechanism includes cutaneous stimulation causing the arterioles to dilate and thereby achieving more circulation. It also assists venous and lymphatic drain. This state of hyper circulation also enhances the transdermal absorption and assimilation. Massage causes movement and thereby accelerating the blood supply, which helps in relieving the muscular fatigue and reduces stiffness. Skin is an organ with rich sensory nerve endings, which on stimulation gives abundant sensory inputs to the cortical and other centers in the CNS<sup>[8]</sup>. In addition to this, as it is the case of growth and development disorder, Medhya, Balya Rasayana and Vakshuddhikara therapies like Syp Shankhapushpi, Brahmi Ghrita were also chosen.

## CONCLUSION

By the end of 2 years of treatment significant results were obtained. The child was able to walk normally a normal gait. The child started playing using his right hand. There was a reduction in the spasticity and a normal movement was observed. Bowel and bladder control was attained. The child was able to make sentences. This, present case report is a documentary evidence of successful management of spastic cerebral palsy by timely and properly planned Ayurvedic mode of intervention based on Doshya Dushya Vivechana.

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## CONFLICTS OF INTEREST

There are no conflicts of interest.

## REFERENCES

1. Guptae suraj. Short text book of pediatrics, 11th ed. New Delhi: Jyapee brother medical publishers Ltd, 2009; 413.
2. Parthasarathy. IAP text book of pediatrics, 5th ed. New Delhi: Jyapee brother medical publishers Ltd, 2013; 390.
3. Guptae suraj. Short text book of pediatrics, 11th ed. New Delhi: Jyapee brother medical publishers Ltd, 2009; 415.
4. Vagbhata. Astanga Hridaya, Sutrasthana, 12/6-7, translated by Srikantha Murthy K R, Vol 1, reprint ed. Varanasi: Chawkhamba Krishnadas Academy, 2007, 167.
5. Agnivesha. Charaka Samhita, Siddisthana, 1/39, translated by Sharma RK and Bhagwan Dash. Vol 6, Reprint ed. Chaukambha Sanskrit series office, Varanasi, 2012, 163.
6. Vagbhata, Astanga Hridaya Sutra Sthana, Dinacharya Adhyaya, 2/8, translated by Srikanta Murthy KR, Vol 1, Reprint, ed. Chowkhambha Krishadas Achademy, Varanasi, 2012; 24
7. Vagbhata, Astanga Sangraha, Sutra Sthana, Swedavidhi Adhyaya, 17/25, translated by Srikanta Murthy KR, Vol 1, 3rd ed. Chowkhambha Orientallia, Varanasi, 2004; 223-4.
8. Shailaja U, Rao PN, Girish KJ, Arun Raj GR. Clinical study on effecacy of Rajayapana Basti and Baladi Yoga in motor disabilities of cerebral palsy in children. Ayu 2014;35: 294-9.

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