

WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.084

Volume 12, Issue 1, 1959-1964.

Case Study

ISSN 2277-7105

AYURVEDA AS A BOON IN CELEBRAL PALSY – A CASE REPORT IN **PAEDIATRICS**

Dr. Ajay Rana* (MD Bal Rog) and Dr. Sonika Jarial (MD Panchkarma)

Working in Smt. Urmila Devi Ayurvedic Medical College, Hoshiyarpur.

Article Received on 20 Nov. 2022,

Revised on 11 Dec. 2022, Accepted on 01 Jan. 2023

DOI: 10. 20959/wjpr20231-30013

*Corresponding Author Dr. Ajay Rana (MD Bal Rog)

Working in Smt. Urmila Devi Ayurvedic Medical College, Hoshiyarpur.

ABSTRACT

Cerebral palsy (CP) is the leading cause of childhood disability affecting function and development. CP is defined as nonprogressiveneuromotor disorder of cerebral origin. It cannot be correlated with any single disease or condition in Ayurveda, as it is a multi-factorial disease with clinical features of a wide variation. According to Vāgbhaṭa, it is classified in the disease categories of sahaja (hereditary) and garbhaja (congenital) and iātaja (psychosomatic) type of diseases. Of the many types and subtypes of CP, none has any known "cure." Here, an effort was made to treat a 5year-old female child with spastic type of CP using multiple Ayurveda treatment modalities. At the end of 60 days of treatment, Panchakarma

procedures along with internal medication resulted in 15-20% improvement in the overall effect of therapy.

INTRODUCTION

Cerebral palsy is the most common chronic motor disability in childhood. Cerebral palsy refers to non-progressive, permanent motor disorders, caused by insult to developing brain. It affects^[2-3] infants per 1000 live births. The most common presentation is with developmental delay. The motor disorders of CP comes with disturbance of communication, cognition, behaviour and sensory system. CP is confidential into four types viz., spastic, ataxic, dyskinetic, and mixed. If we look towards Spastic CP, It accounts for a major piece of CP with commonness between 70% and 80%.

Cerebral palsy cannot be correlated with any single condition mentioned on Ayurveda, as it is a multifactorial disease. How ever, considering the classification and the respective features of the types, Cerebral palsy can be considered as Janma Bala Pravritta Vyadhi (congenital disorder).). It can be considered as Shiro Marmabhighata VataVyadhi (diseases caused due to injury to head). Where Marmaghata occurs due to various causes which are Garbhapurvaka (before conception), PrasavaPurvaka (before delivery), Prasavakaleena (during delivery), Prasavottara (After delivery).

This case study focuses on the management of subject of spastic cerebral palsy with the administration of certain Ayurvedic internal and external treatment modalities. This subject was selected from inpatient department of Kaumarabhritya of Urmila deviAyurvedic medical college of Ayurveda, Hoshiarpur.

History of Present Illness – The child was born out of non-consanguineous marriage, prematurely by lower segment caesarean section (LSCS) and baby did not cry immediately after birth having the birth. Later the child also suffered from neonatal jaundice. Due to all these clinical complications, the child didnot achieve normal growth. By 18months parents noticed a delay in development. Spasticity became apparent after the age of around 2 years and since then the parents started treating the child by visiting many doctors without any significant benefit. Later for the same complaints parents approached smt. Urmila Devi Ayurveda college of medical sciences and hospital, Hoshiarpur, Punjab.

HISTORY OF PAST ILLNESS

- Jaundice

TREATMENT HISTORY

- The child was given medications during treatment course which parents does not know. She also went under physiotherapy.

FAMILY HISTORY

- No family history and consanguinity found.

BIRTH HISTORY

- Antenatal: Mother was suffering from mental stress during pregnancy.
- Birth weight was 2 kg (very low birth weight).

POSTNATAL HISTORY

- Jaundice.

PERSONAL HISTORY

Āharaja

- Patient was totally dependent for food intake, and was eating only semi solid food due to lack of management in deglutition. Appetite was poor.

Vihāraja

- Nature of activity was always assisted. She takes help of her mother while doing work. Sleep was disturbed (2–3 h/day, 4-5 h/night). Bed wetting (had not achieved bladder control) and dribbling from the mouth was there since birth.

Examination

- Vitals were normal. Cardiovascular system, respiratory system and per abdomen examinations had shown no deformity

Aşţavidhaparīkṣā

- Nāḍi (pulse) was vātādhikatridoṣaja. There was no complaint with regard to Mūtra (urine). Frequency and colour were normal. Mala (stool) was constipated and passes with a foul smell and dark colour, once in 2-3 day Bowel control was not yet achieve (which should have been achieved by 2-3 years of age). Jihvā (Tongue) was sāma (coated suggestive of improper digestion). Sabda (speech) was not learnt.

Sparśa (touch) was hard and dry (due to hypertonia and spasticity). Drk (eyes) showed squint in right eye (divergent and the concomitant type of squint). Akṛti (appearance) was emaciated.

Central nervous system examination

Patient was diagnosed to have the hypertonic (spasticity) and contractures at ankle and knee joint. Muscle power could not be elicit because enduring was not capable to follow the command. Sensory system was undamaged and no abnormality was found. Cranial nerve examination could not be done because of ruthlessly handicapped physical and mental state of the patient. Hyperreflexia was nearby, redolent of upper motor neuron disease (which is the hallmark of CP). Babinski sign was up going (positive). Meningeal signs were not present.

Differential diagnosis

Spastic CP, demyelinating (degenerative) disease of central nervous system (CNS), sequel of postnatal hypoxia.

Diagnosis was confirmed by modern pediatrician

"Severe quadriplegic spastic CP" as a sequel of postnatal hypoxia

Treatment protocol

Total duration -60 days.

Internal Medicine

SR.NO.	TREATMENT PLAN DATE	TREATMENT GIVEN
1	16.07.2022 to 20.07.2022	 DeepanPachan(chitrakadivati)1-1 after food Shunthi Kashaya Paan 5ml OD
2	21.07.2022 to 22.08.2022	Swarnaprashan 2-2 drops once in morning.

EXTERNAL TREATMENT (PANCHKARMA)

Set no.	Treatment plan date	Treatment given
	21.07.2022 to 03.08.2022	1. Abhyanga with ksheerBala oil
		Initially 15 mins, reached up to 30 mins
1		2. Patra potali swedana (5min- 10min)
		3. Physiotherapy 10 mins
		4.Matra Basti 15 ml

Set No.	Treatment plan date	Treatment given
	07.08.2022 to 06.09.2022	1. Abhyanga with ksheerBala oil.
		2. Masha pindaswedana.
2		(10 min initially, reached up to 30 mins)
		3. Upnaha with kolkulatthadi + Godhuma.
		4. Matra Basti 20 ml.

Set no.	Treatment plan date	Treatment given
2	13.09.2022 to 27.09.2022	1. Abhyanga with ksheerBala oil.
		2. Masha panda swedana.
3		3. Upnaha with kolkulatthadi + Godhuma
		4. Matra Basti 20 ml.

DISCUSSION

Spasticity is characterized by increased confrontation by passive stretch, velocity dependent and asymmetric about joints (i.e., greater in flexor muscle at the elbow and the extensor muscle at the knee). This may happen due to āvaraṇa of vāta, wherein, due to āvaraṇa, vāyu cannot perform its normal function, that is, normal movement of joints (pravartakacestanam).

Ashwarth scale shows 20% improvement in spasticity because initially abhyanga would have helped in a reduction of vitiated kapha by its dryness-inducing and blockage-removing properties. Once avarana is removed, vitiated vata can be pacified by further treatment. Vayu resides in sparśanendriya which is located in the skin. Massage is said to be as tvachya (good for the skin). Hence, massage might have directly worked on vata to bring it back to normalcy. Basti acts on CNS by stimulating enteric nervous system (ENS), there are many evidences linking CNS and ENS. [4-7] Spasm scale shows 25% improvement, due to samana of vātaguņas which are cala and śīta due to the action of aṣṭāngaghṛta, massage with balataila, sudation, and mṛduśodhana Āsthāpana Basti. Manual ability classification system shows 20% improvement due to a reduction in spasticity and improvement in ROM.

CONCLUSION

Going by the results of this case study, we can end that Ayurvedic Panchakarma therapy along with appropriate internal medication can do a lot for the improvement in Quality of life. In this patient, the overall effect was found near around 15 -20%. As this disorder is difficult to cure, this percentage of improvement in this kind of situation is significant and in that, if we are able to make small improvements in an earlier age, then it will reflect as a major benefit in later age in the form of developing skills, before, it was thought that neurons do not mend or rejuvenate after any injury, but the new notion of neuroplasticity says that CNS have the skill to repair their neurons by axonal developing to take over the function of injured neurons.

REFERENCES

- 1. Gupta KA, Vrudha Vagbhata, Ashtanga Samgraha. Varanasi: Chaukambha Krishnadas Academy, 2005. Sutra Sthana 22/3; 172. [Google Scholar]
- 2. [Last 2010 14]. accessed on Jan Available from: http://www.en.wikipedia.org/wiki/cerebral_palsy#cite.
- 3. MKC Nair, RK Pejaver. Child Development and Beyond; Bangalore. Prism Books, 2000; 9. [Google Scholar]
- 4. Polak F, Morton R, Ward C, Wallace WA, Doderlein L, Siebel A. Double-blind comparison study of two doses of botulinum toxin A injected into calf muscles in children with hemiplegic cerebral palsy. Dev Med Child Neurol, 2002; 44: 5. [PubMed] [Google Scholar]

- 5. Butler C, Campbell S. Evidence of the effects of intrathecal baclofen for spastic and dystonic cerebral palsy. AACPDM Treatment Outcomes Committee Review Panel. Dev Med Child Neurol, 2000; 42: 634–45. [PubMed] [Google Scholar]
- 6. Farmer JP, Sabbagh AJ. Selective dorsal rhizotomies in the treatment of spasticity related to cerebral palsy. Childs Nerv Syst., 2007; 23: 991–1002. [PubMed] [Google Scholar]
- 7. Pascual-Leone A, Amedi A, Fregni F, Merabet LB. The plastic human brain cortex. Annu Rev Neurosci, 2005; 28: 377–401. [PubMed] [Google Scholar]