

**Impact
Factor
3.025**

ISSN 2349-638x

Refereed And Indexed Journal

**AAYUSHI
INTERNATIONAL
INTERDISCIPLINARY
RESEARCH JOURNAL
(AIIRJ)**

UGC Approved Monthly Journal

VOL-IV

ISSUE-XI

Nov.

2017

Address

• Vikram Nagar, Boudhi Chouk, Latur.
• Tq. Latur, Dis. Latur 413512 (MS.)
• (+91) 9922455749, (+91) 8999250451

Email

• aiirjpramod@gmail.com
• aayushijournal@gmail.com

Website

• www.aiirjournal.com

CHIEF EDITOR – PRAMOD PRAKASHRAO TANDALE

Case report: Ayurvedic management for child with Cerebral Palsy

Vaibhav Jaisawal,

Corresponding Author ,
Assistant Professor,
Department of Kaumarbhritya/Balroga,
Faculty of Ayurveda,
Banaras Hindu University,
Varanasi -221005

E-mail:drvaibhav29@gmail.com

Amrita chaudhary

Junior Resident 2nd year,
Department of Kaumarbhritya/ Balroga,
Faculty of Ayurveda,
IMS BHU

Abstract:

A 19 month old female child Avani suffering from cerebral palsy with spastic quadriplegia was admitted in ayurvedic ward with complains of unable to sit without support, unable to hold objects properly, also unable to speak properly.

Patient can only sit in tripod position for few seconds, tries to utter few words that are mostly monosyllables and few bisyllables and used to cry very loud.

The child is having history of severe birth asphyxia with delayed cry and was admitted in NICU for around six weeks under fluid and antibiotic therapy and in ventilator for around six days. This may be the possible cause of cerebral palsy. A patient's MRI of brain was undertaken which reveals abnormal cystic encephalomalacia which mainly suggests periventricular leukomalacia sequelae of perinatal hypoxic ischaemic brain injury. Patient was on modern medicine in the form of various medications and physiotherapy but didn't get significant relief. The patient was examined according to the centre for disease control guidelines and gross motor functional classification system guidelines for cerebral palsy. An Ayurvedic treatment plan was made in the form of oral medications and balpanchkarma therapy for 21 days including yogbasti.

Significant improvements were noticed such that now patient can sit without support for few minutes, can stand with support for few seconds, also muscle tone was much reduced than earlier.

Keywords: - Birth asphyxia, Balpanchkarma, Periventricular leukomalacia.

Introduction:- A 19 month old female child was admitted in ayurvedic ward with following complains , unable to sit without support, unable to hold objects properly, unable to speak properly according to her age. Patient can only sit in tripod position for few seconds, tries to reach towards objects but grasping power is poor (bidextrous), tries to speak many words which are mostly monosyllables but speech is not clear and cries very loudly.

Birth history:- A full term \Appropriate gestational age baby was born from primigravida mother through spontaneous vaginal delivery with delayed cry for few minutes with APGAR score < 5 at 5 minutes of age. Baby was admitted in NICU on fluid and antibiotics therapy for around six weeks and was on mechanical ventilator for around six days. Vaccination was also properly covered up to age.

On examination of central nervous system, the deep tendon reflexes (biceps jerk, triceps jerk, knee jerk, ankle jerk), were exaggerated. Among the superficial reflexes, i.e. abdominal reflexes was absent, on plantar reflex extensor plantar response was present i.e. Babinski response was positive. Tone was

increased in bilateral upper and lower limbs. Cortical thumb was present and there was scissoring in legs at the level of ankles. The patient was examined according to Centers for Disease Control and Prevention guidelines for motor milestones and Gross Motor Function Classification System guidelines for motor functioning level for cerebral palsy. According to CDC guidelines, head holding grade- 1 i.e. head erect and steady momentarily, in sitting grade- 1 i.e. sits momentarily was present and standing was not achieved with or without support. According to GMFCS guidelines, in fine motor milestone grade -1 is present i.e. try to reach and holds things with crude method, in language grade- 2 is present i.e. can speak monosyllables and much few bisyllables, in personal and social milestones grade- 2 is present i.e. recognizes mother.

Patient's MRI of brain was undertaken which reveals abnormal cystic encephalomalacia with white matter volume loss in bilateral parieto-occipital, peritrigonal and periorlandic region and in bilateral dorsal thalami with thinning of corpus callosum and cerebral white matter. Imaging finding suggests periventricular leukomalacia sequelae of perinatal hypoxic ischaemic brain injury.

Material and methodology:-

Patient was examined according to above mentioned guidelines:-

Assesment components:

CDC grading for motor milestones

Grade	Head holding	Sitting	Standing
0	No head holding at all	Not sitting at all	Does not stand at all
1	Head erect and steady momentarily	Sits momentarily	Stands holding furniture momentarily
2	Supine lifts head when pulled up by arms	Sits 30 seconds or more leaning forward	Takes a few steps, both hands hold
3	Prone elevates self by arms and chest	Sitting straight	Without support, can stand alone
4	Holds head steady when moved around	While sitting, can manipulate a toy	Stands up, all by himself by throwing weight on arms
5	Head balanced always	Raises self to sitting position	Takes a few steps without support

GMFCS Level

Grade	Fine Motor	Language	Personal and Social
0	No grasping at all / absent palmer grasp	Unable to speak or produce sound at all	Absent social smile and recognition
1	Try to reach and holds thing with crude method	- Marked cooing	Social smile and recognition

2	Try to reach and holds things with good grip	Monosyllable	Recognizing mother
3	Transfer object from one hand to another hand	Bisyllables	Anxiety to stranger
4	Uses thumb and index finger and holds small object	Two words with meaning	Attracts towards toy and displeasure on taking it away
5	Uses end of thumb and index finger / Neat pincer grasp	Makes simple sentence	Resist if toy is pulled
6			Mimicry, understand spoken words and responds in appropriate manner

Assessment criteria include **CDC grading** for motor milestones and **GMFCS Level** for motor function level. Suitable scoring pattern was prepared.

A total of 21 days treatment plan was made, which includes oral medications and balpanchkarma. On 10th day of balpanchkarma therapy a yogbasti was planned.

Oral medications:- Jatamamsiphanta 20 ml B.D., Jatamamsichurna 1gm B.D. with water, Bittervachamool rubbed 30 times on stone with milk and one almond with honey, Mahanarayan oil 1 ml per orally, Brahmichurna 1gm B.D.

Panchkarma therapy:- Snehana with Mahanarayan oil and Mahamashadi oil for 5-10 minutes, Shalishastipindiswedana with dashmool decoction for 5-10 minutes. Avagahan with dashmool decoction for 10-15 minutes. Shiropichu with Jyotishmati oil and Mahanarayan oil.

A YogBasti was planned on 10th day of treatment which consists of five anuvasanbasti and three niruhabasti.

Anuvasanbasti was given 20ml which includes mahanarayan oil 10 ml and mahamashadi oil 10 ml.

Niruhabasti was given with dashmool decoction 40ml, mahanarayan oil 15ml, kalka 5ml which consists of ashwagandha, vacha, bala, erandmoolchurna, and madhu, saindhavlan in very small amount i.e. a total of 60 ml.

Result:- When patient was further examined after 21 days of panchkarma therapy a significant changes were noticed.

- According to CDC guidelines, in head holding from grade -1 i.e. head erect and steady momentarily to grade-4 i.e. holds head steady when moved around.
- In sitting from grade -1 sits momentarily to grade-3 sits straight.
- In standing, grade-0 does not stand at all to grade-1 stands holding furniture momentarily.
- According to GMFCS guidelines, in fine motor from grade-1 tries to reach and holds things with crude method to grade-4 uses thumb and index finger and holds small objects.

- In language from grade- 2 monosyllables to grade -4 bisyllables.
- In personal and social milestones,from grade -2 recognise mother to grade- 4 attracts towards toys and displeasure on taking it away.

Discussion:-

Cerebral Palsy is a diagnostic term used to describe a group of permanent disorders of movement and posture causing activity limitation,that are attributed to non-progressive disturbances in the developing fetal or infant brain. The motor disorders are often accompanied by disturbances of sensation,perception,cognition, communication and behavior as well by epilepsy and secondary musculoskeletal problems. The incidence of CP in developed world is 2-2.5 per 1000 live births.The incidence of CP in India is 1.5 to 3.5 per 1000of all live births.

Considering the signs and symptoms of CP, the disease entity seems to be very close to the presentation of vata-vyadhi(disease caused due to predominance of vatadosha). Treatment of vatadosha consists of a variety of modalities among which Basti (enema) is said to be prime one.

According to Vagbhata,it is classified in the disease categories of sahaja(hereditary),garbhaja(congenital) and jataja(psychosomatic disorders) type of diseases.

There is no any correlation available in Ayurvedic classics with CP,but there are many conditions and some causative factors linked to etiopathology for such type of disease condition described in many chapters in different texts. Some conditions which find an overlap of symptoms of CP include phakka (a kind of nutritional disorder),pangulya(locomotor disorders), mukatva(dumbness), Jadatva(mental disorders), ekangroga(monoplegia), sarvangaroga(quadriplegia), Pakshaghata(hemiparesis),pakshavadha(hemiplegia),etc,under the group of vatavyadhi(neurological disorders).Contributory factors like inappropriate ritu(ovulation cycle),kshetra(uterus),ambu(amniotic fluid and fetal nutrition) and bija(sperm and ovum),dauhrdaavamanana(neglect of urges during dauhr stage of pregnant women),presence of garbhopghatkarbhava(substances which can cause defects or death of fetus),incompatible garbhvriddhikarbhava(normal requisites for growth and development of fetus) and improper garbhiniparicharya(antenatal regimen) may have undesirable effects on the fetus hampering its normal growth and development consequently leading to many diseases,deformities,and even death. Considering all the above,ayurvedic therapy has a good effect on CP patients.

Cerebral Palsy is caused by a broad group of developmental,genetic,metabolic,ischaemic, infectious,and other acquired etiologies that produces a common group of neurologic phenotypes. Intrauterine exposure to maternal infection(Chorioamnionitis,inflammation of placentar membranes,umbilical cord inflammation,foul smelling amniotic fluid,maternal sepsis,temperature>38 degree celsius during labor,urinary tract infection) was associated with a significant increase in the risk of Cerebral Palsy in normal birth weight infants. Fewer than 10% of children with cerebral palsy had evidence of intrapartum asphyxia.

Conclusion:-

Cerebral Palsy is a non progressive neuromotor disease which has very limited improvement from current modern medicine. Patient attendant are very much furious and disheartened about this disease. Patient becomes liability for family and society. He cannot perform normal day to day work in a society where remaining children are running,walking,playing whereas a child of CP remain like a plant.They are not like object whom to be ignored. They need our love and care as well as support of society so that they live happily.Ayurvedic therapy has a much fruitful effect on this disease as in this patient.

References:-

- 1.CharakSamhita by Pt. KashinathShastri and Pt. YadunandanUpadhyay,Choukhambha Prakashan,2009,Sharir Sthan,MahaGarbhavaKranti Adhyaya,4\16,4\18,4\27.
- 2.Charak Samhita by Pt.KashinathShastri and Pt. YadunandanUpadhyay,Choukhambha Prakashan,2009,Chikitsa Sthan,RasayanaAdhyaya,Karprachitiya and AyurvedaSamutthaniya Adhyaya,1\3-23, 1\4-5
- 3.CharakSamhita by Pt.KashinathShastri and Pt. YadunandanUpadhyay,Choukhambha Prakashan,2009,Chikitsa Sthan,VatavyadhiAdhyaya, Ch 28,KusthaChikitsa Adhyaya, 7\87,ShawyathuChikitsa Adhyaya,12\64.
- 4.CharakSamhita by Pt.KashinathShastri and Pt. YadunandanUpadhyay,Choukhambha Prakashan,2009,Sutra Sthan,Shadvirechanshatashritiya Adhyaya,4\49
- 5.Sushrut Samhita by Dr.AmbikaDatta Shastri,Part-1,Chaukhambha Sanskrit Bhawan reprint 2006,Sutra Sthana,Dravyasangrahaniya Adhyay,38\23.
- 6.SushrutSamhita by Dr.AmbikaDatta Shastri,Part-1,Chaukhambha Sanskrit Bhawan reprint 2006,Chikitsa Sthana,SadyovranChikitsa Adhyaya.2\75
- 7.Sushrut Samhita by Dr. AmbikaDatta Shastri,Part-1,Chaukhambha Sanskrit Bhawan reprint 2006,Sharir Sthana ,ShukrashoditSuddhiSharirAdhyay2\33
8. AshtangaSamgraha by K A Gupta,ChaukhambhaPrakashan,Krishnadas Academy,20th Sthana,22\3.
- 9.Kleigman,Stanton,ST. Geme ,Schor,Behrman,Nelson Textbook of Pediatrics,20th edition,vol 2,Ch 598
- 10.Nelson,Karin,Grether,Current Opinion in Pediatrics:Dec 1999.
11. Indian Journal of pediatrics,July 2004,Issue 7,pp 627-634.
- 12.Ancient Science of Life,2015 Jan-Mar; 34(3): 167-170
- 13.Palisano RJ,HannaSE,Rosenbaum PL.et al. Validation of a model of gross motor function for children with cerebral palsy,Phys Ther.2000;80:974-985
- 14.Palisano RJ,Rosenbaum PL, Walster SD, Russell DJ,WoodEP,GalupiBE.Development and reliability of a system to classify gross motor function in children with cerebral palsy. Dev Med Child Neurol.1997;39:214-223
15. Wood EP,RosenbaumPL.The Gross Motor Function Classification System for Cerebral Palsy.Dev Med Child Neurol.2000;42:292-296.