A CASE STUDY ON EFFICACY OF AYURVEDIC THERAPY AND MEDICINE IN THE MANAGEMENT OF INFANTILE HEMIPLEGIA IN CHILDREN

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ABSTRACT

Infantile hemiplegia, acute hemiparesis that occurs in infancy and is usually caused by a vascular accident such as cerebral infarction or thrombosis; frequently associated with seizures. It is achieved by multifactorial approach of Ayurveda that includes shaman, sanshodhan, rasayan chikitsa, sattvavajaya chikitsa. Aim & Objective: To access the efficacy of Panchakarma treatment and Ayurvedic medicine in the management of Infantile hemiplegia. Setting: IPD of Kaumarabhritiya, Rajiv-lochan Ayurvedic college & Hospital Chandkhuri, Durg (Chhatisgarh). Method: Panchakarma was done with oral medicines. Assessment was done before and after shodhana and shaman treatment 30 days follow-up. Result: Panchakarma treatment and Ayurvedic medicine is given 70% result in the management of Infantile hemiplegia and to improve the quality of life of the affected child.
KEYWORDS: Infantile hemiplegia, Ayurvedic medicine, Abhayang, Matrabasti, Shastik-shali panda sweda.

INTRODUCTION
Hemiplegia/hem-i-ple-gi-a is derived from the Greek words hemi (half) and plegia (paralysis), meaning total paralysis of one side of the body, including the face, arm and leg. Acute hemiplegia of childhood is most often due to cerebrovascular disorder.[1] Infant with specific hemiplegia have decreased spontaneous movements on the affected side and show hand preference at a very early age.[2] Infantile hemiplegia is a rare condition of the nervous system that usually appears in children prior to the age of 4. The other causes are intracranial infection, birth trauma, uremia, hypertensive encephalopathy.[3] The exact cause often remains obscure despite modern diagnostic aids and extensive investigation.[4] Symptoms transient hemiplegia, headache, chest pain, seizures, fever etc.[5] The treatment depends on the etiology of hemiplegia.[6] Congenital or infantile hemiplegia refers to brain injuries that occur before or at birth and lead to hemiplegia. Juvenile hemiplegia is seen in patients who sustained injuries above the age of 1 year.[7] Acharya charak said, when vitiated vata affect to left or right side of the body then its restricted to limb for movement, and other symptoms are patient have slurred speech headache.[8] The symptoms of skanda graham(Hatekpaksha) which is given by Acharya vagbhat is also similar to pakshavadha.[9] Acharya susruta also mentioned pakshavad in the contex of asta-mahagada roga. The symptoms of ardita also indicate about pakshavadh in Charak Samhita.[10]

CASE REPORT
A 9 month aged male patient was brought to Rajiv-lochan Ayurvedic college & Hospital Chandkhuri, durg (Chhatisgarh) with complaints of loss of strength in the left upper and lower side.

Brief History
Patient had 1st episode of convulsion developed at the age of 4th days, for the same complain patient admitted to N.I.C.U for 7 days. At the age of 4 month mother observed that child was not able to hold his neck, so they consulted to nearby hospital, Doctor advised physiotherapy for 3 month, but patient had no relief then mother observed at the age of 6 month that patient had loss of strength in the left upper and lower side.
All the developmental mile stones delayed appropriate for the age, administered with immunization scheduled as per the age. For the same complain, they brought the child to hospital.

**Antenatal History**
Age of mother at the time of conception was 26 years and the father was 29 years. The mother took regular antenatal checkups and took medicine on time. Mother had complained of oligohydramnios at the time of pregnancy. No history of any kind of infections, hypertension, diabetes, or seizures was reported.

**Natal History**
Mother had complained of oligohydramnios, so emergency LSCS was indicated because of fetal distress at 36th week of gestation age. He cried after given stimulation, and had a birth weight of 2.4kg.

**Postnatal History**
He had Birth Asphyxia, neonatal jaundice during the neonatal period and also complained of convulsion at the age of 4th day, Admitted in NICU for 7 days.

**Family History:** All family member said to be normal.

**Developmental History:** Delayed milestones attained.

**Medical History:** 1. Syrup Pedicloryl, syrup Levenue, Tab.cloba MT 2.5mg.

**Immunization History:** Given as per Schedule.

**Dietic History:** Exclusive breast feeding was done upto age of 3 month, weaning began with boiled potato, fruit juice, banana etc.

**Personal History**
Appetite – Good  
Bowel – Once/day  
Micturition – Normal, 4-5 time/day  
Sleep – Normal
General Examination
General Comment–Alert, active, well nourished child with normal sensorium.

Vital signs
HR –102/min RR –20/min Temp.98.4°F

Anthropometry
HC –44 cm CC –46 cm
MAC –16.5 cm MTC- 28 cm
Ht –68 cm Wt –10 kg

On Examination
Respiratory system: Chest bi- symmetrical, no added sound RR- 20/min.
Cardio-vascular system: S1S2 Heard, No murmurs, HR-102/min.
Per-abdomen: Soft, no any prominent veins, no any organomegaly.

Central nervous System: Higher mental functions, cranial nerves are normal. Muscle power is 5/5 in right side and 1/5 at left side, Gait-Not attended, muscle tone is normotonic. Sensation- normal, hearing-normal, language- monosyllables, co-ordination-normal, Signs of Meningeal Irritation–Nil.

Investigations
MRI- A well-defined CSF containing cyst line y white matter is seen in right frontal and parital lobe communicating with right lateral ventricle. Findings are suggestive porencephalic cyst. Area of blooming are noted in the right sylvian fissure and sulci along the posterior wall of cyst is consistent with hemosiderin residue of old hemorrhage.

EEG-Focal slow wave present in EEG report.

ECHO- Normal 2D ECHO & colour doppler study.

Ayurvedic View
Kaphapradhan tridosh dusti.

Diagnosis
The case was diagnosed as infantile hemiplegia. Ayurvedic diagnosis is Ardhangvata.
Assessment Criteria

Subjective For assessment the result four symptoms will be kept as parameter.

A) Muscle power
a. Grade 0 No muscle activation
b. Grade 1: Trace muscle activation
c. Grade 2: Muscle activation with gravity eliminated.
d. Grade 3: Muscle activation against gravity.
e. Grade 4: Muscle activation against some resistance.
F. Grade 5: Muscle activation against examiner’s full.

B) Grasping power of limbs
a. Grade 0- Grasping absent
b. Grade 1- Patient makes effort
c. Grade 2- Patient able to compress the article
d. Grade 3- Patient make effort against the pressure

C) Movement of limbs
a. Grade 0- No movement
b. Grade 1- Knee angle (180 degree) with movement
c. Grade 2- Knee angle (90 degree) with movement
d. Grade 3- Knee angle (60 degree) with movement

Objective
Lab investigation (if necessary)
a) EEG.
b) CT –scan

Method: Panchakarma was done with oral medication, Assessment was done.

RESULT AND DISCUSSION
Effect of Pachakarma therapy and Ayurvedic medicine on symptoms of Hemiplegia.

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<th>Assessment Criteria</th>
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<th>AT 1st F/U</th>
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<td>Muscle power</td>
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<td>2.</td>
<td>Grasping power of limbs</td>
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<tr>
<td>3.</td>
<td>Movement of limbs</td>
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Treatment Plan

Snehana, swedana and basti karma as line of treatment of vatavyadhi mentioned in chikitsa sthana of Charak samhita and grita preparation is given as oral medication.\textsuperscript{[11]} mridu-basti said by Acharya sushruta for the bala.\textsuperscript{[12]} For better and further case management patient had been consulted and after assessing strength, prakriti, agni, etc. and panchakarma planned for this patient. Initiation with deepana-pachana with Avipattikar Churna 1/4 tsf with honey at night for 2 days only. After that started Matrabasti Basti i.e. 8 days Followed by Sarvang Snehana by bala taila and for swedana Shashtika shali panda sweda, matrabasti given by Kalyanka ghrita 15 ml were dose was decided according to Acharya kashyapa.\textsuperscript{[13]} Vacha choorna (50mg) were added with kalyanka ghrita for matrabasti and shiroabhayanga with kalyanka grita for 8 days. For these 10 days patient admitted in IPD of Kaumarabhritya department and then discharged. Internla medicines are swarna vasanta maliti rasa ¼ tab BD with ¼ tsf samvardhana grita, syp. Balaswagandha rista 3ml ml for 30 days. Advice for Follow up in every 30 days, and given same therapies for 8 days and oral medication are same as 1\textsuperscript{st} visit for 1 month. 3 setting was done. With above mentioned line of treatment patient parents saw 70% improvement in child.

CONCLUSION

Hemiplegia is a not common disorder in children. In this case study were treatment was planned on the bases of treatment of hemiplegia which are mentioned in classics. Maximum treatment was planned at the form of ghrita preparation because of Acharya charak was mentioned ghrita as line of treatment of vatavyadhi. In children, it's very difficult to administration of drug. Hence in this study, an easier route of administration was explored, for providing a management with better outcome. The result was showed as 70% relieved to patient from hemiplegia condition.

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