ISSN: 2320-7329

http://www.ayurlog.com

Oct-Dec: 2024 | Volume: 12th | Issue: 4th

NATIONAL JOURNAL OF RESEARCH IN AYURVED SCIENCE

# Management of delayed milestone's patient with Ayurveda - A case report

**[1] Mehare Mrunal*, [2] Nikam Archana, [3] Muratkar Sameer**

1. PG scholar, MD Ayurveda, Government Ayurved College and hospital Nagpur, Maharashtra-440009,
2. Head of department, department of *Kaumarbhritya*, Government Ayurved College and Hospital, Nagpur, Maharashtra-440009. drasnikam@rediffmail.com, contact no-9422915779
3. Ph.D Scholar, Department of *Kaumarbritya* , Mahatma Gandhi College Hospital and Research Centre, Salod (H), DMIMS, Wardha. sameermuratkar@gmail.com, contact no-9403238377

***Corresponding author:** mrunal.mehare@gmail.com. Phone No: 8788458945.

**ABSTRACT**

Children, who are opposite to adults are characterized by a continuous process of physical growth and neuromotor development. Milestones are the predicted points for when a child reaches a significant stage in their development such as walking or talking. A delayed milestone is when a child has not reached a significant stage at the predicted age. In the world, about 6.6% of children suffer from developmental delay while 15- 20% of children suffer from cerebral palsy. A 2-year-old male patient with gross developmental delay with seizure disorder, EEG showing Hypoxic Ischemic Encephalopathy (HIE) received *Ayurvedic* treatment for about 6 months. At the end of 3 months, the patient showed very encouraging results. The patient was treated with *Shaman Chikitsa, Shirodhara, Nasya, Basti, Marmapidan, Viddhakarma***.** Aim of the of Study was to treat the patient and bring him back to normal growth and development. In this single case study, the patient was thoroughly examined clinically his gross motor, fine motor, language, and personal and social developmental milestones were noted before treatment. Patient's improvements were assessed on Trivandrum Developmental Screening Test (TDST)after 6 months *Ayurvedic* treatment. As a result, the patient achieved many milestones during treatment.

**Keywords:** Delayed Milestones, Hypoxic Ischemic Encephalopathy (HIE), *Panchakarma*.

## INTRODUCTION

Delayed development has always demanded more attention from paediatrician. Delay in reaching gross motor, fine motor, personal and language milestones is called developmental delay. Developmental delay may be caused by a variety of factors, including intrauterine infections, postnatal CNS infections, immaturity, perinatal hypoxia, birth trauma, metabolic disorders and complications during pregnancy. [i] Development is also dependent on interaction between innate genetic potential and environment factors. [ii]

## PATIENT INFORMATION

A 2 years old male child was brought by his parents in Balrog OPD of Government ayurvedic college Nagpur. Patient was in BPL category. Father was working on Daily Wedge and mother was house wife living in joint family. Physically patient has appearance of idiotic look, head lag and spastic scissor gait, complaints that unable to turn on tummy, unable to sit with support, Unable to stand with support and walk, Head was lagging neck holding yet to develop and Jerking movements of hands and legs during sleep since last 12 months of age. After taking patients history during pregnancy child's **mother** was suffering from asthma since 6$^{th}$month of pregnancy. She was using inhaler bronchodilators. **Father** was Suffering from Poliomyelitis (Paraplegia). Child was full term delivered by L.S.C.S. Birth weight was 2.5 kg, baby **didn't cry immediately after birth**. Admitted in N.I.C.U for one month after birth. No history of Pneumonia/pathological jaundice or other major illness at or after birth. At the **age of 1 yr patient suffered from seizure episode** from that time patient was receiving Syp Varparin. 4 ml BD, Syp Neurokind 2.5ml BD, Syp. Gardenal 2.5ml BD. In **Family History** no consanguinity is found. In **Immunization history** immunization completed up to 2 yrs of age as per schedule. Patient was taking breast milk and other semi-solid food. Appetite was good. *(Uttam Kshudha)*. Patient was always on bed, had not achieved even neck holding and extra drooling of saliva is present since birth. Not achieved bowel and bladder control. Other vitals were normal.

## CLINICAL FINDINGS

Child was unable to do eye contact. Upward gaze, Swallowing difficulty, Spasticity in both upper and lower limbs. Do not move to the sound. Drooling of saliva. Child had constipation and irregular bowel habit. Tongue (*Jiwha*) was *Alpasaam.* Child was unable to speak even monosyllables. He was not responding to any verbal communication. His eyes had convergent squint in left eye.

General examination: Appearance- mentally retarded, body build- lean, orientation- less oriented, pallor (conjunctiva)- absent, Icterus- Absent. Child was conscious, less oriented, well Alert. Patient is diagnosed to have hypertonia (spasticity) and contracture at both elbow joint. Muscle power was not obtained because patient is unable to follow commands. Sensory system was intact and no abnormality found**.**

C.T scan (13/10/2021) showed Hypoxic Ischemic Encephalopathy, EEG (13/10/2021)-Showed abnormal EEG pattern and seizures during sleep. MRI was not done due to poor economic condition of patient.

After OPD examination patient was diagnosed with Hypoxic ischemic encephalopathy (HIE) with global developmental delay with seizure disorder.

**4. Therapeutic interventions and assessment**

For above clinical presentation patient was treated with *Snehan* [iii] *(*massage with medicated oil*) Swedan* (steam), *Shirodhara* (pouring a liquid onto the forehead), *Nasya* [iv](administration of drug by nasal root), *Annalepan* (where rice is directly applied to an individual's body), *Jiwha Pratisaran* (rubbing of tongue), *Marmapidan* (Marma point therapy) and *Snehapan* (internal oleation). First cycle of treatment was given from 2 June 2022 to 4 June 2022 *Snehan* was done with *Mahamash Tail* and *Swedan (Nadi Swed)* was done. *Shirodhara* with *Brahmi and Dhanvantar Tail*, *Nasya* with *Anu Tail*, ***Annalepan*** with *Shashtishali, Udad, Bala Churna and Ashwagandha Churna*. ***Jiwha pratisaran*** with *Vacha +Yashtimadhu+Akkalkara. Snehapan* with *Kumar Kalyan Ghrit* 10 ml BD and *Arvindasav* 5 ml BD. ***Marmapidan*** of *Shirastha (Sthapani, Avarta, Shakha, Apang, Shrungatak, Adhipati and Krukatika), Shakha Marma (Kshipra, Talhriday Kurcha, Kurchashir, Manibandha, Indrabasti, Kurpar, Janu, Aani, Bahavi, Lohitaksha, Kakshadhar, Vitap) and Prushta Marma (Kukundara, Nitamba, Parshvasandhi, Brihati, Ansaphalak, Ansa)* is done. Second cycle of treatment was given from 10 July 2022 to 30 July 2022 ***Snehan*** with *Chandan Bala Lakshadi Tail* and *Swedan*. ***Shirodhara, Marmapidan*** and ***Annalepan*** was continued like first cycle. ***Nasya*** with *Shadbindu Tailwas given (As patient was suffering from Pratishay) Then again Anu Tail Nasya is started.* ***Basti*** started after proper *Dipan Pachan* of patient. ***Majja Basti*** is given. *Kumar Kalyan Grit* dose was reduced to 5 ml BD. ***Brihan Yog*** *(*A mixture of *Shishubharan Ras, Ashwagandha, Brahmi, Yashtimadhu, Aamalki, Shatavari, Tapyadi loh* are mixed properly and ½ tea spoon with ***Goghrit*** **Anupan)** was given BD. ***Jivha Pratisaran*** with *Vaacha, Yashti* and *Akkalkara. Sitopaladi* and *Yashtimadhu* with honey is given. In third cycle of treatment child was given ***Panchatikta Kwath, Panchatikta Grit*** and ***Mahasneha Basti.*** Other treatment was same as second cycle.

**5.Fallow up and outcomes**

Outcome after first three cycle is mentioned in Table No 1. In Jan 2023, Aug 2023 and in June 2024 also patient continued the treatment for 1-1 month

**DISCUSSION**

Treatment was started after *Koshtashuddhi* of patient. For *Koshtashuddhi* After *Snehapana Gandharva Haritaki Churna* is given *sos.* Then in the first cycle of treatment *Mahamash Snehan* was given to strengthen the *Mamsa Dhatu.* [v] and *Swedan* was given to reduce the spasticity of muscles. *Brahmi Tail* was selected to stimulate the brain activity [vi] and *Dhanvantar tail* is used for *Vaatshaman* and *Poshan.* [vii]As we know *Shrungatak Marma* is responsible for development of senses, so in order to develop speech and other senses *Anu Tail Nasya* is given. [viii] *Annalepan* is done in order to increase *Bal* of *Mamsa Peshi (muscle strenghth). Arvindasava* is used as *Sarva Bal Vyadhi, Grahdoshhar.* [ix] *Marmapidan* is

done to improve the blood flow, to reduce spasticity.

In second cycle *Nasya* with *Shadbindu Tail* is given as patient was suffering from *Pratishay* then again *Anu Tail Nasya is started. Jivhapratisaran* is done to promote speech. *Sitopaladi Churna* with *Yashtimadhu* is given because *Shirodhara* was continue even during *Varsha Rutu t*o avoid *Vyapad* like *Pratishay* it is given.

In third cycle *Panchendriya Vardhan Tail* is used to develop all *Indriyas*. For *Asthi Poshan* and *Vardhan Basti* with *Panchatikta Kwath + Panchatikta Ghrit + Mahasneha* is given.

## PATIENT'S OPINION

In June 2022, I visited the doctor for my 2 years child as he was suffering from scissor and most of the time he just sleeps like newborn baby. He was just eating and sleeping, he doesn't have even neck holding. After meeting doctor, I was counselled about his condition and treatment. After starting treatment gradually, he started holding neck. He stopped rolling his eyes. started sitting with support and standing with support. He started understanding things making eye contact and started smiling. In Jan 2023, Aug 2023 and in June 2024 I continued the treatment and now he can walk with the support. He can individually step down the bed, he drinks water by himself. Try to eat food by himself. Says mamma, papa. When we inquire where his nose is, he points it out. He tries to wear clothes and shoes. Adore himself in the mirror. He listens to everyone and follow commands.

## CONCLUSION

Developmental delay due to HIE is a common problem in paediatric practice. Damaged neurons cause developmental delay in gross motor, language and social milestones. There is no effective treatment till date for developmental delay due to brain damage. Ayurvedic treatment definitely help to reduce disability and improve the growth and development of the patient. Unlike Morden medicine ayurveda do not sedate the patient it works on *Dosha*, *Dhatu* and promotes the development of the patients.

## REFERENCES


1. Meherban singh, Pediatric Clinical Methods, Chapter 6 , New Delhi CBS Publishers &distributors 2020, 76
2. Meherban singh, Pediatric Clinical Methods, Chapter 6, New Delhi CBS Publishers & Distributors; 2020, 77.
3. Agnivesha, Acharya Y. T. (ed.), Charaka Samhita Ayurved deepika vyakhya,Chakrapanidatta, Chikitsasthan; vatvyadhichikitsadhyay: Adhyay 28, verse , 79, Varanasi Chaukhamba Surbharti Prakashan ,2020; 620.
4. Agnivesha, Acharya Y. T. (ed.), Charaka Samhita Ayurved deepika vyakhya,Chakrapanidatta, Chikitsasthan; vatvyadhichikitsadhyay: Adhyay 28, verse , 79, Varanasi Chaukhamba Surbharti Prakashan ,2020; 621.
5. Thakur Nrusingh, Rastantrasar v Siddhaprayog Samgraha, Gopal Krushna Ayurved Bhavan, part 2, ed 2000, 151
6. Thakur Nrusingh, Rastantrasar v Siddhaprayog Samgraha, Gopal

Krushna Ayurved Bhavan, part 2, ed 2000, 139.
7. Garde K. G., Ashtang Hridaya, Sharirsthan; Garbhavyapat Sharir; Chapter 2, verse 47-52; Varanasi Chaukhambha Surbharti Prakashan, 2018, 131.
8. Garde K. G., Ashtang Hridaya, Sutrashana; Nasyavidhimadhyaya: chapter 20, Verse 38-39, Varanasi Chaukhambha Surbharti Prakashan, 2018, 87.
9. Gune Shastri G., Ayurvediya Ashadhigundharma, Chaukhamba Sanskrit Pratishthan, Ed 2014, part 5, 62.
10. Meherban singh, Pediatric Clinical Methods, Chapter 6, New Delhi CBS Publishers & distributors; 2020, 91

**Table no 1: TRIVANDRAM DEVELOPMENTAL SCREENING TEST (TDSC) [x]**

| **Sr no.** | **Item** | **Lower limit** | **Upper limit** | **Before treatment** | **After 1st cycle of Treatment** (2/6/2022 to 4/7/2022) | **After 2nd cycle of Treatment** (10/7/2022 to 30/7/2022) | **After 3rd cycle of treatment** (5/8/2022 to 3/9/2022) |
|---|---|---|---|---|---|---|---|
| 1 | Social smile | 1 day | 2 months | Unable to do Eye-to-eye contact | Giving slight smile | social smile present | social smile present |
| 2 | Eyes fallow object | 1months 3 days | 3 months | No eye - to-eye contact | Only Follow for few sec | Fallow for 30-35 sec | Fallows the object |
| 3 | Holds head steady | 1months 3 d | 3 months 24 d | Head was lagging | Holds head for few sec | Holds head for 25 sec | Holds head for 1 min |
| 4 | Rolls from Back to Stomach | 2 months 21 d | 4 months 24 d | Spastic body | Trying to roll from back | Rolls from back to stomach for few min | Rolls from back to stomach and even started crawling |
| 5 | Turns head to the sound | 3 months | 5 months24 d | Head was lagging | Hold head for a min | Holds head but tremors present | Able to hold as well as turn |
| 6 | Transfer Objects hand to hand | 4 months 3 d | 7 months | Spasticity presents no grip | Not able to hold the object. Spasticity reduced | Able to hold light toys. (Pen) | Able to hold the small toys. Bidextrus grip |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 7 | Raises self to sitting position | 5 months24 d | 11 months | Unable to roll back | Trying to roll from back | Unable to sit | Sitting with support |
| 8 | Standing up with support | 6 months 9 d | 11 months | Not able scissor gait present | Not able to stand scissor gait still present | Not able to stand scissor gait reduced | Able to sit with support scissor gait reduced but spasticity still present |
| 9 | Fine prehension pellet (pincer grasp) | 6 months 24 d | 11 months | Spasticity presents no grip | Not able to hold the object. But spasticity reduced | Bi-dextrous grasp | Tries to grasp |
| 10 | Pat a cake | 6 months 24 d | 12 months 21 d | Not able to perform | Not able to perform | Tries to move hands on stimulation | Moves hands but unable to pat a cake |
| 11 | Walks with help | 7 months 24 d | 13 months | Spastic Scissor gait present | Spastic Scissor gait present | Spasticity, reduced Scissor gait | Spasticity reduced but unable to stand with support tip toe standing |
| 12 | Throws ball | 9 months 15 d | 16 months 24 d | Not able to | No | No | Able to hold but Unable to throw |
| 13 | Walks alone | 9 months 27 d | 17 months 12 d | Not able to walk | Not able to walk | Not able to walk | Not able to walk |
| 14 | Says two words | 11 months 6 d | 19 months | Not able to say words | Not able to say words | Responds to sound | Cooing present |
| 15 | Walk backwards | 11 months 6 d | 19 months 15 d | Not able to walk | Not able to walk | Not able to walk | Not able to walk |
| 16 | Walk upstairs with help | 12 months 6 d | 24 months 15 d | Not able to walk | Not able to walk | Not able to walk | Not able to walk |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 17 | Points to parts of doll (3 parts) | 15 months 9 d | 24 months 15 d | Not able | Not able | Not able | Not able |
| 18 | Remove garments | 21 months | 25 months | Not able | Not able | Not able | Not able |
| 19 | Uses words for 1 personal needs | 24 months | 27 months | Not able | Not able | Not able | Not able |

(Patients chronological age was 25 months but mental age was only of 1 month)

**Table no 2: PATIENT'S IMPROVEMENT ASSESSMENT CHART**

| Sr no | Milestones | Before treatment | After treatment |
|---|---|---|---|
| **1** | **Neck holding** | **Absent** | **present** |
| **2** | **Roll over** | **Absent** | **present** |
| **3** | **Social smile** | **Absent** | **present** |
| **4** | **Sitting with support** | **Absent** | **present** |
| **5** | **Standing with support** | **Absent** | **present** |



*Conflict of Interest:* *None* *Source of funding:* *Nil*

***Cite this article:***

*Management of delayed milestone's patient with Ayurveda - A case report*

*Mehare Mrunal, Nikam Archana, Muratkar Sameer*

*Ayurlog: National Journal of Research in Ayurved Science- 2024; (12) (04): 01- 08*