

MANGEMENT OF GLOBAL DEVELOPMENTAL DELAYED CHILD WITH AYURVEDA– A CASE STUDY

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ABSTRACT:

Introduction: - Development refers to maturation of functions, which is a continuous process from conception to adolescence. Cephalocaudal development is same in all children but the rate of development varies from child to child. Delay in development occurs when the child fails to attain developmental milestones as compared to peers from the same population. A two year old female patient with global developmental delay received *Ayurvedic* treatment for about two months. At the end of 2 months patient showed very encouraging results. A patient was treated with *Shaman Chikitsa, Shirodhara, Nasya, Marmapidan*. **Aim and Objective:-** The case study focus on the management of children with global developmental delay with *Ayurvedic* approach. **Material Method:-** It is a single case study, patient was thoroughly examined clinically and her gross motor, fine motor, language and personal & social developmental milestones were noted before treatment by TDSC scale (Trivrndrum Developmental Screening) & after two months *Ayurvedic* management patient was again assessed with the same scale and improvement noted. **Results & Conclusion:-** The patient have shown considerable improvement in the domains of global developmental delay after *Ayurvedic* Management with internal medicine, *Shirodhara, Nasya, Abhyang &, Marmapidan*. Thus we can conclude that with the *Ayurvedic* therapeutic procedures & internal medicine global developmental delay can be very well managed. **Keywords:-** Gobar developmental delay, *Ayurveda, Panchakarma. Nasya Marmapidan*.

INTRODUCTION

- Developmental delay is the most distinctive attribute of children and is a continuous process from conception to adolescences. ^[1]
- The Development proceeds in a cephalocaudal direction. The infant initially develops head control followed by ability to roll over & grasp, sitting ,crawling, standing & walking. ^[2]
- The developmental delay in two or more spheres (Motor, Adaptive, Social, Language, etc.) is called Global developmental Delay. ^[3]
- **Risk Factor**
 - Intrauterine infections
 - Perinatal Hypoxia
 - Birth trauma
 - Metabolic disorder
 - Post natal infection
 - hypothyroidism^[4]



AIM

- To understand the efficacy of *Ayurvedic* Management of Global Developmental Delay.

Objective

- The case study focuses on the *Ayurvedic* Mangement of Global Developmental Delay.

Material & Methodology

Personal History :-

Name	XYZ
Age	2YR
Gender	Female
Birth weight	3.1kg
Vaccination	All done

Complaints :-

Delayed Milestones
Not yet neck holding Achieved
Intermittent fever
Unable to turn tummy
Unable to sit with support
Quadriceps spasticity.

Vartaman Vyadhi Vrutanta

- 2yr Female patient came to OPD with previous complaints. She was normal before the age of 5 ½ month.
- She started symptoms after AFI with B/L pneumonitis as 5 ½ month of age.
- After several treatment she got admitted to *Balrog* IPD for further *Ayurvedic* treatment.

History

➤ Antenatal History -	Patient mother was suffering from hypothyroidism during pregnancy, on medication tab Thyrox 75mcg.
➤ Family History -	No Consanguinity marriage is found.
➤ Natal history -	Full term LSCS , Baby cried immediately after birth.
➤ Past Disease History -	At the age of 5 ½ month patient was admitted to hospital for time period 1 month for AFI with B/L Pneumonia with status epilepticus with culture positive sepsis with subdural hygroma with acute on chronic hemorrhage.
➤ Medication History -	Tab Pacitone9 (¼ - ¼) Syrup epitoin (5ml BD) Syrup Leviracetam (0.6 ml BD)
➤ Personal History -	<i>Aharaja</i> – Patient was on semisolid diet, appetite was bad <i>Viharaj</i> – Patient was always on bed, had not achieved even neck holding yet.

Daignosis – Global Developmental Delay

Vital Examination

- **Respiratory System** - Nothing abnormal detected.
- **Cardiovascular System** - Nothing abnormal detected.
- **Central Nervous System** – Conscious, less oriented, well alert.
- **Muscle power grade** – Rt

1

Lt

Nidan Panchank

- **Hetu** - At 5 ½ month of age patient suffered from AFI with B/L pneumonia.
- **Purvarupa** - Patient loses previously acquired milestones.
- **Rupa** - The Developmental Delay in more spheres (Motor, Adaptive, Social, Language)
- **Upashay** – *Upashayanugami*.

➤ **Samprapti**

At 5 ½ month of age patient suffered from AFI with B/L pneumonia.



Agantuja jwar lead to *Vata pitta Dushti*

B/L pneumonia lead to *Vikruta Vata Kapha*



Subdural Hygroma – *Rakta dushti*



Tridosha Dushti Janya Vyadhi (Vata Pradhan)



Mashtishka 'Kha' Vaigunya



Further Milestones are not achieved but already achieved milestones are also Hampered.

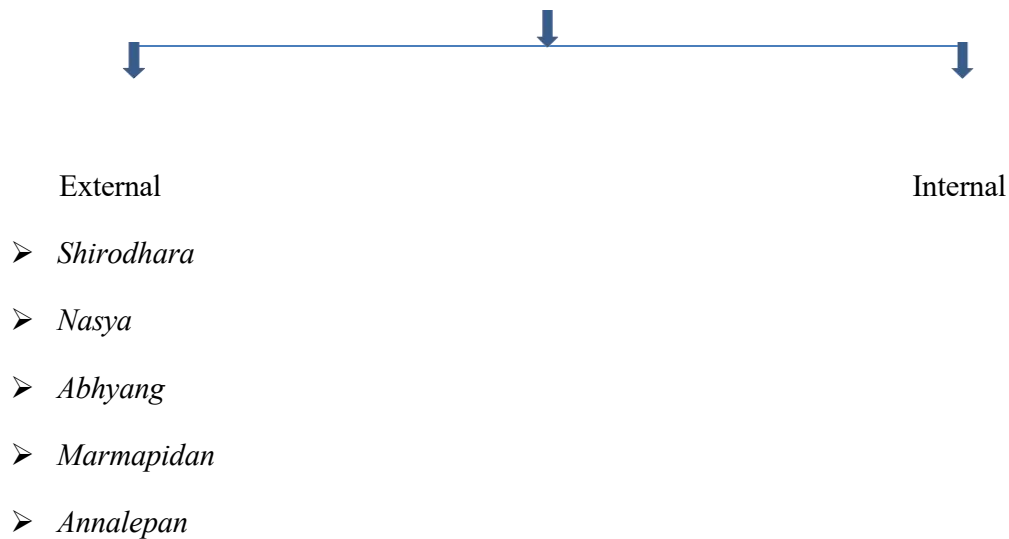


Global Developmental Delay

Mangement

- The patient was frequently sick (Fever , Cold). Patient *Bala* (Strength) Was very low, so first of all we tried to increase her *Bala* .
- Although she is now 2yr old but her mental age is not that much. All the developmental milestones achieved by patient before pathology was also hampered.

Treatment



Internal Medicine

Name	Dose	Anupana	Duration
<i>Amrutarishta</i>	5ml BD	<i>Koshna Jal</i>	For 28 days
<i>Kumarkalyan Ghruta</i>	5ml BD	<i>Koshna Jal</i>	For 48 days & still going on
<i>Sanshamani Vati</i>	1 BD	<i>Koshna jal</i>	For 48 days & still going on
<i>Drakshasava</i>	5ml BD	<i>Koshna jal</i>	Start after 28 days for 15 days
<i>Syrup Drakshagandha</i>	5 ml BD	<i>Koshna jal</i>	Start after <i>Drakshasava</i> & still going on.
<i>Saptamrut Loha</i>	1 BD	<i>Koshna jal</i>	

<i>Syrup Bravobal</i>	5 ml BD	<i>Koshna jal</i>	Next 21 days & still going on.
<i>Ahaliva Churna</i>	½ tsp	½ cup of Milk	Next 21 days

External Therapy

1/ Abhyanga



Abhyanga with Chandanbalalakshadi tail.

- *Saptadhatu vivardhanam,*
- *Vata Amayahatanam,*
- *Abhyanga helps to improve blood circulation, provide relief from stiffness,*

2/ Swedan



Hast Swedan

- To reduce the spasticity of muscles.

3) Shirodhara***Shirodhara with Brahmi +Dhanvantar tail.***

- *Brahmi tail* - to stimulate the brain activity
- *Dhanvantar* -for *vaatshaman* and *poshan*)

4)Nasya***Nasya with Anu tail.***

- *shrungatak marma* is responsible for development of senses.
- To develop speech and other senses *Anu tail nasya* is given.

5/ *Annalepan*



- *Annalepan* with *Shashtishali*+*Udad*+*bala churna*+ *ashwagandha churna*.
- In order to increase bal of mans peshi.

6] *Marmapidan*

- *Marmapidan* of *shirastha*,*shakha* ,*prushta marma*,*indrabasti*,*ksipra*,*karpur*,*janu*,*gulpha*, is done.
- To improve the blood flow, to reduce spasticity .

Findings(BT & AT Comparison)

	Before	After
Head Circumference	44cm	45.5cm
Mid upper arm circumference	11.5cm	12.5
weight	6.3kg	7 kg
length	72cm	78cm

TDSC (TRIVENDRUM DEVELOPMENTAL SCREENING CHART)

Assessment Criteria	Before treatment	After treatment
Social Smile	Yes	Yes
Eye follow pencil	No	Yes
Holding head s	No	Yes
Roll from back to stomach.	No	Yes
Turn head to sound	No	Yes
Stranger anxiety	More	Less
Quadriceps Spasticity	More	Less
Cross leg	Yes	No
Appetite	Bad	Good
Playful activity	Less	More
Irritable	More	Less
Sleep Pattern	bad	Good

Discussion

- In the parameter of TDSC scale was taken as assessment criteria to check efficacy of treatment.
- There is specific improvement shown in this TDSC scale.
- Improvement can be seen in activities like neck holding, roll from back to stomach, turn head to sound, weight gain, more playful, less irritable, improve sleep pattern, increase appetite.
- In these two treatment cycle, internal medicine, *Shirodhara*, *Nasya*, *Marmapidan*, *Annalepan* & other methods of therapy were used, the patients *bala* was increased. After this, in the following treatment plan
- we have thought to plan *Basti* therapy treatment.

Result & Conclusion

- In this patient, hopeful improvement has been found after two cycle of treatment.
- This percentage of improvement also help to improve the quality of life.
- Developmental delay is a common problem in paediatric practice. 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.

Lessons Learn

- By the result of this case study, we can concluded that *Ayurvedic* therapy along with appropriate internal medication can do a lot for the improvement in Global Development Delay disorder.

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