

Ayurvedic Intervention For Autism – A Case Study

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Abstract

Holistic health is looking beyond the physical body and is addressing physical, emotional, social, spiritual and intellectual health. In autism there is social, social, emotional, and sometimes intellectual health impairment is observed in the child. It affects boys more than girls and actually exact number of children living with autism is not known. In autistic child there are 3 core symptom interactions observed; Social interaction difficulties, Communication difficulties and, Behavioral problems. Autism can occur as a result of genetic mutation, environmental risk factors during pregnancy, paternal age at higher site.

The present study describes the case of childhood autism visited at Datta Meghe Ayurvedic Hospital. Child was diagnosed clinically and has been treated with Ayurvedic interventions, Panchakarma therapies and diet modification. Child has got relief symptomatically within one week of therapy started. Case study briefly explained Ayurvedic concepts regarding childhood autism and Ayurvedic treatment protocols in autistic disorder.

Keywords: Autism spectrum disorder, childhood autism, hyperactivity, ADHD, Psychosomatic disorder, pervasive developmental disorder, Ayurveda, speech development.

INTRODUCTION

Early scientific studies of children, concentrated on specific areas of child behavior, such as speech, emotions, or play interest and activities. The studying different areas of child behavior at different age levels would be different. It would not add to our understanding of how behavior characteristics change as children grow older and of what causes them to change.^[1]

Autism is a spectrum disorder and now community aware about autism; many of them having strong genetic background which is responsible to functional derangement of the brain and many metabolic functions derange in these kids, and involvement of immune system also the evident of many researches. Environmental factors are proven to precipitate the co-morbidities and symptomatology of autism so many of research studies evidently come off with central nervous system pathology like migration, some structural abnormalities in hippocampus motor neuron abnormalities.^[2] Our main concern is physiological abnormalities like behavioral issues, social interaction and communication deficits. Eventually there is somatic backup for these psychological issues. Parallel to the psychological issues; there is a hidden somatic issue like metabolic disturbances, metabolic error and defective gut brain axis and oxidative stress.^[3]

At Ayurvedic platform we view autism as psychological abnormality having a strong somatic background. So we believe that without correcting somatic error we are unable to manage the psychological abnormalities.

Ayurvedic concept of autism: in Ayurveda there is a concept of Agni (metabolic fire) which working in every individual and agni is responsible for every digestive and metabolic activity in each and every person. If there is impairment in agni it causes impairment in metabolism and there is accumulation in metabolic waste in the system^[4]. This metabolic waste altering the brain functions.

Management protocol: the main aim of treatment therapy towards correcting the digestive errors. The corrections in gutleakage by improving gut mucosa immunity, so that no more gut leak. Treatment planned with three aims- 1 improve gut mucosal immunity, 2 detox the system, 3 medhya drugs implementation.^[5]

Material and Methods:

All relevant Ayurvedic and modern science literature along with internet databases is referred for study.

Methodology: the present case study designed as - Case introduction

Mother's complaints

Case history

Case conceptualization

Diagnosis

Treatment.

Case study:

Case introduction- Five year old male child presented with mother at Datta Meghe Ayurvedic Hospital, with the complaints hyperactivity, no communication skill, less eye contact and very few speeches. Child has almost normal physical development. Physical appearance or physical growth (weight, height) of child is appropriate to age. Child has displayed many diagnostic markers towards autistic disorder like limited eye contact, lack of communication with family members and peers.

Mother's complaints- Mother reported unremarkable developmental history shortly till date. She noted her child is unable to communicate with family member even with herself. Child is not planned anything with her and other, he is not aware or not concerned about his dressing, food, toys ect. She concerned about his hyperactivity. She reported that child is doing purposeless movements and does not seat at one place for a minute. Mother has special concern about child's language or few talk. She told that child spoke very less and not communicates for anything. Mother reported about his sleep, which is child has awakened early in morning (4am) daily and after that he doesn't sleep for all day.

Mother complaints are concluded as child has difficulties in following domain-

Prefer to play alone

Poor eye contact

Fail to develop peer relation

Inattentive and impulsive

Hyperactivity and nail biting

Language delay.

Case history:

5 year, male child living with mother, father, and younger brother in Delhi. He was started his kindergarten at the age of 3 year in Delhi public school. When child was 4 year old, parent started treatment for to child for delayed speech and hyperactivity at nearest pediatric clinic but not get significant relief.

Birth history- child was born full term, healthy pregnancy, LSCS (large head size) and didn't have NICU admission history. Birth weight was 3.5kg. Child has breast fed exclusively till the age of six months. No history of neonatal convulsions or any neonatal illness.

Family history- Child is living in Indian culture, with mother, father and younger brother. He was very close to his grandmother but grandmother passed away. Paternal age at marriage was 35 year and mother was 26 year old at the time of marriage. They married without any stressors. Immunization- child has immunized as per immunization schedule till date.

Medical history- No history of any major illness was reported by mother, she reported the history of ear infection to the child at the age of 2.5 years, also reported the history of constipation. Child has delayed speech and parents started the therapy since 1 year.

Developmental history

1. Motor development- Gross motor and Fine motor skills achieved at proper age. No any delay motor components find.
2. Language – almost language skills achieved delayed like;
 - Waved bye-bye..... 2year
 - Spoke in start (2 words).....4 year
 - Unable to state full name
 - Unable to state his age
 At present age child could able to spoke 2 to 3 words.
3. Social – social development was normal up to the age of 2 years, after that child does not interact to other, does not communicate to other people, and does not play with peers.
4. Behavioral - The main concern of parent was about his hyperactivity. Child does not sit or stay for a minute at one place. He ran out in surrounding, and doing purposeless movements. One thing was noted that after touch to him he was pinched back to other.

Case conceptualization:

Overall child presented clinically significant problems like socially avoidant behavior with respect to interactions with same age peers and to a lesser extent family members, poor eye contact and hyperactive behavior. After all, keenly observation in 3 to 4 visits of child to OPD and as per parent’s complaints, case was clinically conceptualized as-

Social Interaction	Communication	Behavior
⇓	⇓	⇓
Less eye contact	No/few talk	Lack of awareness
No facial expressions	Take away from other	Hyperactive
Not comfortable by touch / pinch back.	No peer relationship	Purposeless movements

Diagnosis: in this case the diagnosis was made by clinical examination. The gold standard diagnostic tool- Autism Diagnostic Observation Schedule (ADOS), which require multiple hospital visits of patient and keen observation. The clinical symptoms considered to diagnose the case as Autism are-

- a. Qualitative impairment in social interaction, manifested as- marked impairment in the use of nonverbal behaviors such as eye to eye gaze, facial expression to regulate social interaction.
 - b. Failure to develop peer relationship appropriate to developmental age
 - c. A lack of seeking to share enjoyment to other.
 - d. Lack of social or emotional reciprocity.
- The disturbance causes clinically significant impairment in social, emotional and behavioral areas of functioning.

Treatment: - The primary goals of treatment are to maximize the child’s ultimate functional independence and quality of life by minimizing the core features of the disorder.

Treatment includes- 1. Panchakarma Therapies 2. Ayurvedic Intervention

1. Panchakarma therapies

Serial No.	Therapy	Drug used and dose	Duration
1	Abhyanga (Massage)	Bala oil, at morning and evening daily	3 months

2	Nasya (nasal instillation)	Kshirabala oil, 2 drops in each nostril at morning and evening daily	3 months
3	Shirodhara	Til (seasum) oil- 1 liter + Brahmi oil- 100ml, oil changed after every 15 days.	Daily for minimum 40 mints, for 40 days
4	Basti (medicated enema) Matrabasti	Brahmighrita, 30ml	48 days-3 cycles of Yoga basti. 1 wk interval in each cycle

2. Ayurvedic Intervention: It includes plant origin medicines and herbomineral Ayurvedic formulations (gold kalpa/ preparations)

- a. Bhrihatvachintamani rasa....10 tablets.
- b. Brahmivati.....10
- c. Vacha + Yastimadhu + Shatavari +
- d. mixed this combination (a,b,c) well
Aswagandha + Guduchi + Shankhpuspi – and made fine powder, divided it equally into 60 parts. (near about 0.5 gram in each part)..... Given this combination of medicine (1 part) morning and evening (BID), with honey.
- e. Mahapaishachikghrita....5 gram at morning with Luke warm water for 1 month.

Results: Child gets relief symptomatically within 8 days of starting the panchakarma therapy and internal medications.

Serial No.	Symptom	Result	Duration
1	Sleep	Sleeping hours were increased Sleep disturbances stopped	After 1 st day of therapy
2	Hyperactivity	Child was calm, stay at place, not ran out, after 7 days of therapy	after 7 th day of therapy
3	Eye contact	Started looking and listening to other	After 20 th day of therapy
4	Communication	Communicate to mother and brother with few sentence	After 1 month of therapy and internal medications.
5	Language	Used little sentence	After 1.5 month of therapy and internal medications.

Discussion:

Autism or Autism Spectrum Disorder (ASD) is a brain development condition; Autism manifests itself as a difficulty in communication/ socializing with others. The disorder can also include obsessive behavior and need for routine, it is a spectrum of disorder meaning that it affects in different ways. Autism can be very different condition to diagnose. It doesn't have a singular cause; genetic and environment are thought to play apart. The core symptoms of autistic disorder include impairment in 3 symptom domains; social interaction, communication and behavior

activities. Autistic disorder is diagnosed by clinical examination.^[6] Ayurveda have good potential to manage the psychological and behavioral diseases by plant origin medicines and panchakarma therapies, without causing any adverse effects in the growing condition of the body. The primary goals of treatment are to maximize the child's ultimate functional independence and quality of life by minimizing the core features of the disorder.

In present case the panchakarma therapy includes 1.Nasya (nasal instillation)- the therapy cleanses and opens the channels of the head, thereby improving the process of oxygenation (prana), which has direct influence on the functioning of brain. The therapy is beneficial if done on regular basis.^[7,] 2. Abyanga- Abhyanga is defined as an Ayurvedic procedure of application of Snehadravyas over body with certain amount of pressure in specific direction. It has been shown anxiety, enhanced performance of alertness and also reduces subclinical depression. Massage has been used in an effort of improve symptoms, disease progression, and quality of life.^[8,9] 3.Sirodhara- It could be said that irrigating the roots, tree get furnished; similarly during sirodhara entire body is benefited. However to prevent vatadosha vitiation sirodhara was applied. Sirodhara induces sleep and stabilize the mind effectively reduces the condition of hyperactivity in children by reducing the chemical transactions inside the brain.^[10,11] Bastichikitsa- Autism is vata predominant disease and bastichikitsa is considered as the most suitable treatment for vata predominant disease and designated as 'ArdhaChikitsa' for all diseases.^[12] According to Kashyapabasti is ardhachikitsa for vatavyadhis among all other treatments of vata.^[13]

The internal medicines used in this case are gold preparations and plant origin herbal drugs. Brihatvachintamani rasa is indicated in neurological disorders and psychosomatic diseases.^[14] Brahmivati is indicated in manasaroga and proved best effective in psychosomatic disorders.^[15] Brahmi is the main herb effective in Autistic diseases in children^[16,17].

CONCLUSION:

Early identification and intervention of autism spectrum disorder is associated with better outcomes; because early implementation of therapies like massage, nasya, dhara can improve social and behavioral functions along with language development in early phase of brain development. Delayed diagnosis can lead to poorer outcome. Ayurvedic intervention and panchakarma therapies like basti, sirodhara, and nasya and other procedures a good potential to reduce the symptoms of autism without causing the adverse effects on growth of the body in growing stage.

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