



“Ayurvedic Perspectives On Attention Deficit Hyperactivity Disorder (Adhd): A Review”

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Abstract: Attention Deficit Hyperactivity Disorder (ADHD) is the most common neurological disorder of childhood. In this growing era of competition children suffering with ADHD find it difficult to cope up and even for parents and teachers to exactly determine the distinguishing factor for the children. *Ayurveda* is found to be the world's oldest and most complete holistic healing modality. So, this article deals with the general knowledge about ADHD and an *Ayurveda* approach towards its causes, pathophysiology and treatment which include the basic treatment of *Manas Roga Chikitsa* i.e *Daiva-Vyapashraya Chikitsa*, *Satvajay Chikitsa* and *Aushada Chikitsa*.

Keywords- *Manas Roga Chikitsa*, *Daiva-Vyapashraya Chikitsa*, *Satvajay Chikitsa*. behavioral, neurological hyperactive disorders

INTRODUCTION

According to the *Ayurveda* theory there are three main types of substances constitutions make up the body. These constitutions are often termed as *Doshas*. Every person has a unique relative to the *Dosha*. The predominance of *Dosha* and the relationship with *Aakash*, *Vayu*, *Agni*, *Jala*, and *Pruthvi*. These *Panchmahabhoota* combine to make *Vata*, *Pitta*, and *Kapha Dosha*. *Vata Dosha* having more *Vayu* and *Aakash*, *Pitta* being more *Agni*. *Pruthvi* and *Jala* form *Kapha Dosha*. The equilibrium of these three *Doshas* helps them to regulate their own effects. The disequilibrium brings out the true values of an individual while the disequilibrium brings out the deterministic features of the individual disease.¹One such ailment that widely affects people today is attention deficit hyperactivity disorder.it is a one of the most common mental disorders characterized by symptoms of inattention, hyperactivity and impulsivity. It affects 5 to 8% of children more common in boys than girls.²Typically emerging in childhood ADHD affects an individual's ability to focus, remain calm and control their impulses. Furthermore, ADHD is often accompanied by secondary symptoms such as insomnia, learning disabilities and delayed language development. These symptoms can impact various aspects of an individual's life including cognitive function, academic performance, behaviors, emotional well-being and social interactions.

Ayurveda Perspective in ADHD

In *Ayurveda* directly description of ADHD is not found. Only abnormal behaviors are discussed under *Unmada*, which shares similar symptomatologic manifestations. *Unmada* is a *Vata-Pitta* Dominant Disorder *Sarva-Dosha* (involving physical and mental doshas) disorder, characterized by *Mano Vibhrama* (mental instability) *Buddhi Vibhrama* (intellectual instability) *Smriti Vibhrama* (memory instability) *Sheela Vibhrama* (emotional instability) *Cheshta Vibhrama* (action instability) *Achara Vibhrama* (behavioral instability). *Unmada* is a *Manovaha Shroto Vikara* involving an imbalance of *Raja* and *Tama guna*.³ According to *Acharya Kashyap Pralap*, *Vaichitya* and *Arti* mentioned under *Unmada Vyadhi* ⁴

which are similar with ADHD symptoms. The features of *Rakshas Rajasik Manas Prakriti* and *Matsya Tamsika Manas Prakriti* are similar to ADHD symptoms which can be correlated by *Unmada*, *Dhee* (logical reasoning) *Dhriti* (mental capacity to store information) *Smriti* (remembering). In Ayurveda, *Tridosha* (three humors), *Triguna* (three qualities) and *Mana* (mind) are intricately linked with each other. *Vata*, *Pitta* and *Kapha doshas* influence physical and mental health *Sattva*, *Rajas* and *Tamas gunas* (qualities) impact mental and emotional well-being. The mind is essential to preserving equilibrium and good health. *Vata dosha* is particularly significant as it can vitiate both *Sharirika Dosha* (Physical humors leading to bodily diseases) *Mansika Dosha* (Mental humors causing emotional and psychological disorders).⁵

According to *Ayurveda* perspective, ADHD is considered a *Vata-Pitta* predominant disorder. In *Charaka Samhita* describe symptoms of inattention, hyperactivity and compulsive behavior as indicative of *Vata* imbalance in the body.⁶ According to the *Charaka Samhita*, "When *Vyana- Vayu* is obstructed by *Prana-Vayu*, it leads to a loss of sensory perception, memory and strength."⁷ *Pitta*- related symptoms of ADHD may include: Irritability, Aggression, Quick temper Impatience. These symptoms can vary in severity and impact daily life. This interconnectedness highlights the importance of balancing *Tridosha*, *Triguna* and *Mana* to maintain overall health and prevent diseases.

Nidana (Etiological Factors): -

Ayurveda texts do not explicitly list *Nidanas* for ADHD, we can consider factors that vitiate *Tridosha* and *Raja-Tama*. Three primary factors contribute to *Manovaha Srotas Vyadhi*.⁸

Asatmya Indriyarth (Improper Use of Sense organs): It refers to the improper functioning of *Gyanendriya* (sense organs) leading to potential health issues. This can occur due to three types of improper functioning.

- **Ayoga (Insufficient)** under-stimulation or inadequate use of sense organs. For Example: A person struggling to hear a question clearly, leading to improper sensory impulses.
- **Atiyoga (Excess)** Over-stimulation or excessive use of sense organs. For Example: A person sensitive to normal frequency sounds, potentially causing hearing impairment.
- **Mithya Yoga (Unsatisfactory)** Incorrect or distorted perception through sense organs. For Example: Misunderstanding or misinterpreting spoken words. These improper functioning patterns are controlled by sense organs, which are ultimately governed by the mind (*Manas*).⁹
- **Mithya Ahara (Improper Diet)** Consuming unhealthy, irregular or incompatible foods that disrupt *Tridosha* balance.
- **Mithya Vihara (Improper Lifestyle):** Adopting bad habits including excessive stress, lack of exercise or inconsistent sleep patterns are the factors that can contribute to the vitiation of *Tridosha* and *Raja-Tama* potentially leading to ADHD-like symptoms.

➤ **Garbhaja Hetu (Maternal Factors)** The physical and psychological development of a child is significantly influenced by maternal factors during pregnancy.¹⁰ According to *Ayurveda* texts *Acharya Charaka* states that a pregnant woman's diet and lifestyle can impact her child's health. For example, consuming excessive sweet foods may lead to diabetes in the child. Poor sleep quality

and nocturnal wandering during pregnancy may lead to *Unmada vyadhi* (mental health issues) in the child.¹¹

Sahaja hetu(congenital factors)- This includes all the factors involved in the morbidity of *Shukra* and *Shonita*. Vitiating in *Beeja*, *Beeja Bhaga*, *Beeja-Bhaga Avayava* due to *Vata* can cause congenital deformities in the child which may be a factor in developing ADHD. If *Rajaswalacharya* (menstrual Regimen) is not properly followed by woman then it affects *Aartava*(*Stribija*)¹² thereby affects the child. All the chromosomal, hereditary or genetic problem can be correlated with above explanation.

LAKSHANA (SYMPTOMS)

TABLE NO. 1: INATTENTIVE TYPE

Symptoms	Correlation with <i>Unmada</i> ^{13,14}	<i>Mansik Prakruti</i> ¹⁵
Caused by insignificant or external factors	<i>Manna Vibhrama</i>	<i>Anavasthita (Matsya Tamsika Kaya)</i>
Lack of capacity to finish projects or home work	<i>Chestitam Mandam (Kaphaj Unmada)</i>	
Forgets the things that are done every day	<i>Smriti Vibhrama</i>	<i>Amedhas (Pashava Tamasika Kaya)</i>
Show inadequate listening abilities	<i>Unmattchitatvam (Puravrup)</i>	
Things are lost or misplaced	<i>Dhee Vibhrama</i>	

TABLE NO. 2: HYPERACTIVE TYPE

Symptoms	Correlation with <i>Unmada</i> ^{13,14}	<i>Mansik Prakruti</i> ¹⁵
Unable to maintain their position in class	<i>Parisarnam-ajastram (Vataj Unmada)</i>	<i>Anavasthita (Matsya Tamsika Kaya)</i>
Spontaneously answers questions before they are finished	<i>Satatam Aniytanam Chagiramutsarga (Vataja Unmada)</i>	
Interrupts or interferes with other people's conversations or activities	<i>Amarsha (Pittaja Unmada)</i>	<i>Amarshina (Rakshas Rajasika Kaya)</i>

Restlessness and constant Movement	Abhidraavan (Pittaja Unmada)	
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	Abhikshnam Smita Hasita-nritya-Geet-Vaditra Samprayoga Asthane (Vataja Unmada)	
Talking To much	Satatam Aniytanam Cha Giramutsarga (Vataja Unmada)	Asamvibhagi (Preta Rajasika kaya)
Touching or playing everything	Hasita-nritya-Geet-Vaditra Samprayoga Asthane (Vataja Unmada)	
Showing emotions without Control	Sarambh Cha Sthane (Pittaj Unmada)	

Diagnosis:

If someone is suspected of having ADHD, they should be evaluated by a medical expert. A diagnosis of ADHD cannot be made or ruled out by any test. The diagnosis is predicated on a pattern of the previously mentioned symptoms. When a child is suspected of having ADHD, the evaluation procedure typically involves parents and teachers. At least one other developmental or mental health issue is present in the majority of children with ADHD. This issue could be learning disability, mood, anxiety or substance use disorder. A physician can assist in determining the presence of these other conditions. A physical exam and neurological assessment that includes screenings of vision, hearing, and verbal and motor skills. More tests may be given if hyperactivity may be related to another physical problem.

A scan called the Neuropsychiatric EEG-Based Assessment Aid (NEBA) System, which measures theta and beta brain waves.¹⁶

CHIKITSA (TREATMENT): -

- **Nidana Parivarjana**¹⁷: This helps prevent and cure it by avoiding the causes of the illness whether they are *Vihara*, *Ahara* or both in addition, the *Nidana Parivarjana* helps to stop the progression of the disease by avoiding particular *Nidana*. As the first line of treatment for all diseases, *Acharya Charaka* and *Acharya Sushruta* advised avoiding their causes because this also helps prevent further illnesses. A comprehensive understanding of *Nidana* facilitates the planning of an effective therapy.
- **Yuktivyapashraya**¹⁸: This encompasses *Aushadha* and *Panchkarma* practices.
 - **Aushadha**: The youngster is unable to concentrate and sit still because of the increase in *Tikshna* and *Laghu Guna* of *Pitta*, the decrease in *Sthira* and *Sthula Guna* of *Kapha* and the increase in *Chala* and *Laghu Guna* of *Vata*. Therefore, medications containing the *Manda*, *Sthira*, *Sthula*, and *Medhya guna* of *Prithvi Mahabhuta* are necessary to balance *Tridosha* and enhance brain function.

TABLE NO. 3 EKALA AUSHADHA

AUSHADHA	MODE OF ACTION
<i>Ashwagandha</i>	Antioxident, Antiinflammatory , Neuroprotective Ashwagandha <i>Rasa, Guna, Veerya, and Vipaka</i> properties aid in the removal of <i>Vata</i> , which in turn aids in the management of ADHD. <i>Ashwagandha</i> and other <i>Medhya-Rasayanas</i> are used to enhance memory and intelligence. ¹⁹
<i>Shankhpushpi</i>	Activity that promotes intelligence, neuroprotective action, action of antioxidants, improves memory performance. ²⁰
<i>Guduchi</i>	Neuroprotective action action of antioxidants, Activity to reduce stress Learning and memory-boosting activities. ²¹
<i>Madhuyashti</i>	<i>Medhya</i> , memory-boosting Glabridin The antidepressant. ²²
<i>Brahmi</i>	Bacopa supports the synthesis of dopamine. Bacosides, or steroidal saponine, are the main active ingredients in <i>Brahmi</i> leaves. According to references, bacosides have a nootropic and cognitive effect by increasing the metabolism of neurotransmitters, improving synaptic plasticity, and activating the serotonergic and cholinergic systems, all of which promote brain function. ²³
<i>Jatamansi</i>	The <i>Parthiv Dravya Jatamansi</i> possesses <i>Snigdha</i> and <i>Medhya Gunas</i> . It counteracts <i>Vayu</i> elevated <i>Chala Guna</i> . Because of its unique scent (<i>Gandha Guna Bahul</i>), it operates on mind rapidly. ²⁴
<i>Vacha</i>	Anticonvulsant, antidepressant, antihypertensive, anti-inflammatory, immunomodulator, and neuroprotective ²⁵

TABLE NO. 4 AUSHADHA YOGA USED IN ADHD

<i>Aacharya Charak</i>	<i>Bhesajhya Ratnavali</i>	<i>Astang Hridayam</i>	<i>Yogratnakar</i>
<i>Kalyanak Ghritam</i>	<i>Astmangal Ghritam</i>	<i>Brahmi Ghritam</i>	<i>Smritisagar Ras</i>
<i>Mahakalyanak Ghritam ,Lashunadya Ghritam</i>	<i>Chaturmukh Ras</i>		<i>Jyotishmati Tailum</i>

Mahapeshachi Ghritam	Ashwagandharishta		
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Panchkarma Procedure

Shirodhara:²⁶ It affects human bodily functions in a neuro-immuno-physio- psychological manner. It soothes the nerves, preserves *vata*, and promotes nerve renewal. EEG wave synchronisation might be aided by *Shirodhara*. In order to improve cognitive abilities and mental activity, it feeds the *Indriyas* and improves blood flow to the brain. *Mana* is stabilised while *Dhee*, *Dhriti* and *Dharana shakti* are increased. *Prana vayu*, *Mana*, *Indriyas* and *Manovaha srotas* are all found in *Shira*; hence they might be useful for ADHD.

Basti:²⁷ *Basti* is recognized as *Ardha Chikitsa* by *Acharya Charaka* and is effective in balancing *Vata Dosha*. According to *Acharya Sushruta*, *Basti* also regulates *Pitta*, *Kapha*, *Rakta*, and various ailments. It influences the entire body through the gut- brain axis, contributing to reduced stress, anxiety, and depression. The substances used in *Basti* may enhance neurohumoral transmission by stimulating the gut-brain connection, influencing behavior and emotions. Additionally, *Raja Guna* is notably dominant in ADHD.

Nasya:²⁸ *Shira* is accessible through *Nasa* “*Nasa hi Shirso Dwaram*” By reaching *Shringataka Marma*, the medications given through it stimulate nerve endings transmit impulses to the brain and improve blood circulation. The nasal mucosa is thus nourished and the vitiated *Doshas* are discharged. Nasal tissue is an ideal site for rapid and efficient systemic absorption due to its substantial blood supply. The medications administered here act to regulate the operation of the neurological system and endocrine system by stimulating the higher brain centres.

Abhyanga: *Abhyanga* is a form of *Ayurveda* therapy which involves massaging the whole body with lukewarm medicated oils. Oleating the body helps Pacify *Vata* which is responsible for hyperactive behavior in ADHD patients. Massage therapy has also been shown to increase serotonin levels which might help to modulate elevated dopamine levels in children with ADHD. It enhances blood flow, promotes physical relaxation, reduces tension, etc.

- **Sattvavajaya Chikitsa:** Maintaining one's mental health and treating mental diseases are the goals of *Sattvavajaya Chikitsa*. “*Sattvavajaya Punah Ahitebhyo Arthebhyo Manonigraha*”²⁹ is the definition of *Sattvavajaya Chikitsa*. *Manonigraha* means control or constraint of the mind. One can achieve mental restraint by reciting the Sanskrit verses “*Manaso Gyanam, Vigyanam, Dhairya, Smriti, Samadhibhih*.” The passage lists the following five virtues: *Gyan* (spiritual knowledge), *Vigyana* (skilled/textual knowledge), *Dhairyra* (patience and willpower), *Smriti* (remembrance), and *Samadhi*.³⁰

Today's psychotherapy works similarly to the *Sattvavajaya chikitsa*. It is described as complete non-pharmacological psychotherapy in ancient texts. Applying the principles and dimensions of *Sattvavajaya Chikitsa* to everyday life is a more general concept that serves as a strategy for managing and overcoming obstacles in life.³¹

DISCUSSION

The causal factors can be identified as *Garbhaja*, *Jataja*, *Sahaja*, and *Purvajanmajataj Hetu*. *Unmada* has *Vata-dominant Tridosha Prakopa* and *Raja-Tama Prakopas*. *Vata Prakopa* occurs in two conditions: *Dhatushayajanya* or *Avaranajanya*. It vitiates *Pitta* and *Kapha*, resulting in *Raja Tama Dushti* through *Manovaha Srotas*. *Vata Prakopa* leads to *Agnimandhyata*, *Ama Utpatti*, *Rasa Dushti* and finally *Dhatushaya* or *Margavarana*. This vitiates *Tridosha*, *Raja* and *Tama*. When vitiated *Doshas* reach the seat of *Mana*, they cause sickness symptoms such as *Mano Vibhrama*, *Buddhi Vibhrama*, *Smriti Vibhrama*, *Sheela Vibhrama*, *Cheshta Vibhrama* and *Achara Vibhrama*. *Nidana Parivarjana* the primary treatment principle is the idea that one should refrain from consuming, taking or doing anything that aggravates or causes disease, according to *Sushruta Acharya*. Since *Astmyaendriyartha Samyoga* aggravates *Vata* along with other *doshas* and leads to sickness, one should refrain from doing *Vata Vardhak Ahara* and *Vihara*. Choosing herbs or medication preparations that decrease *Chala Guna* of *Vata* and boost *Sthira Guna* is necessary for treatment because if a person has more symptoms of the hyperactive kind of ADHD, then *Vata* is prevalent, more specifically *Chala*

Guna. Although *Dhatushaya* or *Margavarana Vata Prakopa* occurs in both, the fundamental therapy approach for each is distinct.

CONCLUSION

ADHD is a neurobehavioral disorder that significantly alters a child's behaviour. The *Ayurveda* perspective on ADHD emphasizes balancing the *Vata Dosha*, which is often aggravated in individuals with this condition. *Ayurveda* suggests a holistic approach, including dietary modifications, herbal remedies, lifestyle adjustments and therapies like meditation and yoga to improve focus, calm hyperactivity and enhance overall well-being. *Ayurveda* offers a variety of amazing plants, herb preparations and certain methods mentioned above that have shown good efficacy in managing ADHD symptoms. Personalized treatments, such as *Brahmi*, *Ashwagandha* and *Shankhpushpi* along with daily routines and proper nutrition help restore balance and promote mental stability. By addressing the root cause rather than just symptoms, *Ayurveda* provides a natural and sustainable way to manage ADHD effectively. Therefore it may be said that *Ayurveda* medicines are safe for use in treating ADHD. Since ADHD is *Yapya Vyadhi*, an effort was made to improve the child's and the family's quality of life.

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