



## Ayurvedic pathogenesis of Attention- Deficit/Hyperactivity Disorder

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### ABSTRACT:

Ayurveda is the unique system which has been in continuous practise for ages. It is both a therapy and a philosophy for leading a meaningful, healthy, and valuable life. It is a highly developed and codified system of life and health science founded on its own original concepts and core principles. Attention-deficit/hyperactivity disorder (ADHD) is an often-misunderstood ailment that affects many children around the world and can sometimes last into adulthood. Ayurved has considered Manas Rogas are separate entity different from Nija and Aagantuj Rogas, Diseases are known to be innumerable due to variations in aetiology, nature, locations, the qualities perceived by five senses and psyche and specifications of treatment. though its adhishtan comprises of mana and sharira. Anavasthita Chittatva closely resemble some of the clinical features and associated features of ADHD. vitiation of tri-doshas overlapped by Rajas and Tamo guna leading to manifestation of the disease ADHD.

**Key words:** Attention- Deficit/Hyperactivity Disorder, *ADHD*, Manovikara, Anavasthita Chittatva.

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## INTRODUCTION:

Attention-deficit/hyperactivity disorder (*ADHD*) is the most common behavioural disorder and it is among the most prevalent chronic health condition affecting school-aged children.<sup>[1]</sup> Also, it is the most extensively studied mental disorder of childhood.<sup>[2]</sup> *ADHD* is characterized by increased distractibility inattentiveness, along with there is lack of satisfying attention; and decreased self-inhibitory capacity; and motor over activity and motor restlessness. In the course of *ADHD*, child suffers academic underachievement, problems with interpersonal relationships with family members and peers and sense of low self-esteem. The classical exponent of Ayurveda, Acharya Charaka has systematically described the concept of psychopathology in context of Unmada. The psychopathological condition is a function of eight essential psychological factors that are in varying degree in all psychiatric disorders. Acharya Charaka explains that all diseases can't be named as their presentations are different depending on the dosha vitiation and the different samprapti of the disease.

## PRAKRITI IN THE CONTEXT OF ADHD

While describing the Doshaja prakriti which is also known as dehaprakriti, Acharya has also stated that only Samadosha prakriti is normal and rest other are abnormal because they are always prone to or suffer from disease.<sup>[3]</sup>

### A. Vata prakriti

Vata is considered as the controller and motivator of Mana and Indriyas.<sup>15</sup> Prana Vayu is responsible for cortical functions and intelligence as well as sensory perceptions ie. controlling the activities of Buddhi, Manas and Indriyas.<sup>[4]</sup>

**Table no. 1 Correlation of vata Prakriti and ADHD<sup>[5,6]</sup>**

S.N	TRAITS	MEANING
1.	Alpasmriti	Short memory
2.	Anavasthitatma	Absent minded
3.	Avyavasthitama	Unsteady minded
4.	Anarya	Infidel
5.	Bahu Bhashi	Talkative
6.	Chala -Dhriti Smriti- Buddhi	Unstable psychic
7.	Chapala Gati- Chesta	Excess activity
8.	Anavasthita Pani-Pada	Fidgety / Squirming

9.	Krodha	Anger
10	Kritagnata	Ungratefulness
11	Matsarya	Jealousy
12	Najitendriya	Without self control
13	Nadridha	Indefinite
14	Pralapi	Delirious
15	Shighra raga vairaga	Short tempered
16	Shighra samarambha	Quick in action
17	Shighra Trasha	Fatigability
18	Adhriti	Unstable retention
19	Adhridha Sauhrida	Unstable friendship

**B) PITTA prakriti:** Promotion of Medha (intellect) is one of the functions of pitta. Sadhakapitta is mainly responsible for Medha (intellect), Buddhi (Intelligence), Abhimana (ego) and Abhipretarthasadhana (achievement of goals). Acharya Bhela has described two types of Alochaka Pitta-Chakshu Vaisheshika and Buddhi Vaisheshika.[7]

**Table 2. Correlation of Pitta Prakriti and ADHD [8,9]**

S.No	TRAITS	MEANING
1.	Tikshna	Courageous
2.	Kleshahishn	Diminished
3.	Kshiprakopa	Short
4.	Kshipraprasad	Quick

5.	Medhavi	Talented
6.	Maani	Egoist
7.	Irshyalu	Jealous

### C) KAPHA:

Kapha is responsible for the best qualities of Dhriti, and mental phenomena, like exhibition of courage, forbearance, zest, variety, knowledge and understanding are attributed to it. Tarpaka Kapha, provides nourishment to the Indriyas with its Snehana quality. A thorough review of Tridoshas and their functions shows that they have significant contribution in many of the higher intellectual functions and influence. Manas in one or the other way. Thus, vitiation of these humors lead to further derangement of various intellectual functions, which inturn will give rise to various abnormal behaviours like ADHD.

### Origin of ADHD

**Sahaja [Aadibalapravrta]:** These types of nidanas are contributed due to abnormalities of shukra and shoṇita i.e. Matruja and Pitruja<sup>[11]</sup>. So, the diseases of genetic disorder will come in this group. ADHD is seen to be associated with family history of mental diseases like depression, Anxiety. In Charaka Samhita explained that ,the part of the sperm or ovum (bija bhaga or bija bhagavayava)which is responsible for particular structure or function if

vitiated, will result in the particular defect in progeny also. This genetic predisposition can be understood in the case of Unmada also by the term 'alpa satvasya' by acharya Vagbhata.

#### **Garbhaja [Janmabala pravrtta]:**

Garbhaja nidanas are those, use of non-congenial rasas by the pregnant women or non-fulfilment of dauhrda, Thus divided into 'Rasaja' and 'Douhrda vimanaja'.<sup>[12]</sup>

#### **Jataja [Doshabalpravritta]:**

These are the causative factors, which are predisposing the child after birth to different types of illness arising due from stomach or large bowel, located in body and mind developing due to santarpana or apatarpana.<sup>[13]</sup>

#### **Manas Prakriti and ADHD**

The nidanas causing vitiation to the mind are also considered as exogenous. Irshya, bhaya, shoka, krodha, are considered as negative emotions and causative factors for mental illness.<sup>[14]</sup> Similarly hina, mithya and ati yogas of artha of manas are responsible for afflicting manas and buddhi. They also can be analyzed with regard to mother and child. Excessive emotional exertion is told as a cause for abnormality of the foetus in all the classics. Resorting to quarrel and hearing abusive words may make the progeny epileptic. It is also told that

children should not be threaten to make them calm from temper tantrums.<sup>[15]</sup> In the case of ADHD no such etiological factors are available in the literature. But negative psychosocial environment like deprivation, abuse, neglect, poor socioeconomic status is described as the etiological factors. The symptoms are exacerbated by stress and complex demands for performance. The disease symptoms itself can cause mood disorders due to poor self-esteem and rejection in the long run. Ayurveda has considered Manas(mind) as one of the substrata of diseases having its own Doshas(Raja&Tama).<sup>[16]</sup> The Sattva component of Manas is considered as Guna(quality) of Manas, and it doesn't cause disease. Thus, in any type of psychological disorder, only raja and tama Doshasa reinvolved as psychopathological factors.

#### **Table no. 3 Rajasa prkriti and ADHD:<sup>[17,18]</sup>**

TRAITS	MEANING
<b>1. Asura Sattva</b>	
Shura	Valiant
Asuyaka	Envious disposition
Aupadhika	Full of attachment &
Raudra	Terrifying temperament
Atmapujaka	Fond of self adulation

<b>2. Rakshasa Sattva</b>	
Amarshina	Intolerant
Anubandhaka	Implacable anger
Chhidrapraha	Strikes by deceiving
Krura	Cruel
Irshu	Envious
Kalahartha	Involved in quarrels
<b>3. Paishacha Sattva</b>	
Bhiru	Coward
Bhisayitarana	Making others dreadful
Vikrita vihar ahar sheela	Abnormal conduct & diet
<b>4. Sarpa Sattva</b>	
Bahu	One who makes
Vairanam	enemies due to his
Viharachar	Hyperative in behaviour
Chapalam	and
Bhiru	Coward
<b>5. Preta Sattva</b>	
Atidukhashila	Whose character and conduct are
Asuyaka	Critical to the virtue of
Akarmashila	Disinclined to work
Vikritatmano	Abnormal psyche
Ahamkrita	Egoist
<b>6. Shakun Sattva</b>	
Anavasthita	Fickle minded
Amarshina	Intolerant

Chalam	Hyperactive
Durmedhasa	Dull-witted or ignorant
Bhiru	Coward

**Table no. 4 Tamas prakriti and ADHD:<sup>[18]</sup>**

<b>1. Pashava Sattva</b>	
Jugupsita charaharam	Disgusting in conduct and food habits
<b>2. Matsya sattva</b>	
Anavasthitam	Fickle minded
Anushakta Krodha	Always angry
Saranashila	Habitual wandering
Parasparabhimarda	Quarrel with each other
Bhiru	Coward
<b>3. Vanaspatya Sattva</b>	
Sarvabudhyan gahinam	Devoid of mental faculties

### Discussion

As we have seen in ADHD is a disorders are inattention, hyperactivity, which shows a basic vitiation of vata hampering attainment, preservation and display of knowledge even if intellect is normal. The contributory factors for which are: Sahaja in terms of

genetic loading, Garbhaja in terms of impairment of satva vaishesika kara bhavas, Jataja with relation to dietary deficiencies/irregularities, The manovahasroto dusti result in the vitiation of rajas and tamas causing impairment in dhriti. These vitiated doshas, Sharira and manasika, gets sthanasamshraya in manas, hridaya and buddhi causing impairment to prana, udana, vyana vatas, sadhaka, aalochaka pittas and tarpaka kapha. The complex vitiation leads to manovibhrama, buddhi vibhrama, smriti vibhrama, shila vibhrama and chesta vibhrama resulting in the symptom cluster: inattention, hyperactivity and impulsivity. This shows an essential pathology leading to the manifestation of ADHD while a difference in the facets of affliction with variation in intensity will explain the co-morbid conditions like Conduct disorder, Learning disorder etc. The progress and severity of the psychopathology lead to associated symptoms of Mood disorders further leading to antisocial personality, drug abuse etc which can be prevented by samprapti vighatan.

### Conclusion

Attention Deficit Hyperactivity Disorder (ADHD) is troublesome to the parents and a chronic mental health

condition. This condition worst affects school going children. ADHD is characterized by an age-inappropriate hyperactivity, impulsiveness and inattention. Children with ADHD may experience significant functional problems, such as academic underachievement, low self-esteem, family members and peers. In Ayurveda emphasizing this condition and overcome by improving Manobalawith some Satwaguna improvement therapy. Raja and Tama Guna dominance persist for a long or if any problem with Sadhaka pitta functions, it could manifest in Specific Prakriti as behavioral problem by vitiating the Manasika Doshas.

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