



### Case Report

## Improvement in Predominantly Hyperactive Subtype of Attention Deficit Hyperactivity Disorder with Ayurvedic Management: A Case Report

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### Abstract

Attention deficit hyperactivity disorder (ADHD) is the most common neurobehavioral disorder of childhood. Its prevalence in India is estimated at 1.3 per 1000. In Ayurveda, the symptoms of ADHD are similar to a clinical condition 'Unmada'. This article discusses the case of an 11-year-old male child who exhibited motor hyperactivity, restlessness, poor attention span, poor scholastic performance, and a mild delay in speech development. He was diagnosed with the predominantly hyperactive subtype of ADHD according to the DSM-5 diagnostic criteria. The patient visited the outpatient department of Tertiary Government Ayurveda College Hospital, for management. The patient has been taking outpatient and inpatient treatment since November 2022. He kept visiting monthly for follow-up and took IP treatment in April-May 2023 and January-February 2024. Ayurvedic treatments like *Udwarthanam* (medicated powder massage), *Abhyangam* (oil massage), *Snehapana* (internal intake of unctuous substance), *Ksheeravasti* (therapeutic enema with medicated milk), *Ksheeradhara* (pouring of medicated milk over the forehead and body in a rhythmic manner), *Sirolepam* (application of herbal paste over the scalp), *Sirodhara* (slow and steady continuous dripping of medicated oil over the forehead) was given along with internal medicines such as *Aswagandharishta*, *Manasamitra vatakam*, *Rajanyadi choornam*, *Dhanwantharam gulika*, *Mahatiktaka ghritam*, *Balahatadi tailam*, *Tagara* tablet to the patient. The patient was assessed using Conners' Parent Rating Scale. The values changed from 119 to 96 before and after treatment, respectively. The Vanderbilt ADHD Diagnostic Rating Scale (VADRS) combined values for ADHD changed from 36 to 30. The Ayurvedic treatment was effective in reducing the patient's hyperactivity and restlessness.

**Keywords:** ADHD, *Unmada*, *Manas*, Neurodevelopmental disorder, Ayurveda

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### Introduction

ADHD is a common neurodevelopmental disorder characterized by persistent patterns of inattention and/or hyperactivity-impulsivity that interfere with functioning and development. It affects academic performance, behavior regulation, and social relationships in children. The key characteristic of attention-deficit/hyperactivity disorder (ADHD) is a consistent pattern of inattention and/or hyperactivity-impulsivity that hinders functioning or development (1). Affected children commonly experience academic underachievement, problems with interpersonal relationships with family members and peers, and low self-esteem. It may co-occur with other emotional, behavioural, language, and learning disorders. Studies of the

prevalence of ADHD across the globe have reported that 9% of school-aged children, 2-6% of adolescents, and approximately 2% of adults are affected by ADHD (2). ADHD is associated with cognitive and functional deficits linked to diffuse brain abnormalities. Structural and functional changes involving the anterior cingulate gyrus, dorsolateral prefrontal cortex, and frontostriatal circuitry are thought to underlie impairments in goal-directed behavior. Moreover, activity in the frontostriatal region is also reduced in these individuals as measured by fMRI (3).

*Hridaya* is the seat of awareness, intellect, and life and governs the body, mind, and senses (3). The mind (*manas*) is the entity through which knowledge is perceived. The sense organs can only perceive their respective objects when directed by the mind. Actions such as controlling the sense organs, practising self-restraint, analysing information, and thinking logically stem from the mind's activity. Beyond the mind lies the realm of intellect (5). Mind (*manas*) consists of three properties (*Triguna*): *Satva*, *Rajas*, and *Tamas*. The predominance of *Satva* is the state of equilibrium responsible for mental health. The predominance of *Rajas* and *Tamas* are the pathological states of mind (6).

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The soul (*atma*), mind, and body (*sarira*) are the tripods of life. The soul controls and regulates the mind and bodily organs through its consciousness. The mind acts as a vehicle for soul desires. The soul has no restraint when it comes to physiological impulses. Hence, in this condition, the mind can control itself (*swasya nigraha*) with an intellectual component called Dhriti (7).

In Ayurveda, ADHD can be correlated with *Unmada* (Insanity). *Unmada* is characterised by the perversion of *manas* (mind), *buddhi* (intellect), *samjna* (consciousness), *jnanam* (knowledge), *smriti* (memory), *bhakti* (desire), *shila* (manners), *cheshta* (behaviour) and *acar* (conduct). The causative factors of *unmada* mentioned in *Charak Samhita* include consuming food and drink that are mutually contradictory in properties, contaminated, unhygienic, as well as insulting the gods and preceptors, and mental affliction due to fear and exhilaration. These causative factors vitiate the *doshas* that afflict *Hridaya*, the abode of intellect, in a person with less *sattva* (character of mind), which further infatuates the mind and results in *unmada* (8). In *ADHD*, disturbance in *manas*, *dhriti*, and *vata dosha* leads to inattention and hyperactivity, intellectual confusion, fickleness of mind, impatience, unsteadiness of vision, and incoherent speech, which are general signs and symptoms of *Unmada*.

The clinical symptoms of ADHD vary widely, and the predominantly hyperactive type frequently presents considerable treatment difficulties. While traditional management strategies encompass behavioral therapy and medication, there is a growing interest in alternative and complementary methods. This case shows measurable improvement in predominantly hyperactive ADHD with Ayurvedic management. It also highlights a practical correlation between DSM-5 diagnosis and Ayurvedic principles, supporting integrative care.

## Patient information

An 11-year-old male child reported to the outpatient department with complaints of hyperactivity, wandering nature, restlessness, poor attention span, poor scholastic performance, temper tantrums, getting angry if his needs are not satisfied, aggressive behaviour, and harming his mother for attention-seeking purposes only. He was the second child of non-consanguineous parents, born through full-term normal vaginal delivery, and had a birth weight of 2.8 kg. He cried soon after birth, and sucking and feeding were good. In the antenatal period, the mother was diagnosed with gestational diabetes mellitus in the third month of pregnancy and was on diet control. In the postnatal period, there were no complications.

He attained all the development milestones at the proper age except for mild speech delay. At 2 years of age, parents consulted for speech therapy for one year. After speech therapy, the child began to speak more words and sentences. Later, parents noticed aforesaid complaints in the child, and at the age of seven, the child had behavioural therapy, speech therapy, language training, and remedial training. After that, the child is taking Ayurvedic treatment from our hospital on a regular outpatient basis with monthly follow-ups. Additionally, the patient received inpatient treatment during April-May 2023 and again during January-February 2024, with each admission lasting 30 days.

The patient's vital signs were within normal limits. He was malnourished, with a weight of 24 kg (<10th percentile), a height of 143 cm (< 50th percentile), and a BMI of 11.7 (< 3rd percentile). A history of adenoiditis associated with mouth breathing and adenoid facies without lymph node swelling was noted during the systemic examination. In the nervous system

examination, all the cranial nerves were intact. In motor system examination, muscle power was normal with reduced muscle bulk.

## Clinical findings

**Table 1: Baseline Mental Status Examination**

Domain	Findings
Appearance	The child appeared lean-built, had adenoid facies, and was constantly on the go.
Behaviour	Hyperactivity, restlessness, inattention, impulsive behavior, physical aggression towards the mother, and temper tantrums when demands were not fulfilled.
Level of consciousness	Alert and active
Delusion, Hallucination, Illusion	Absent
Amnesia/Dementia	Absent
Memory	Reduced
Intelligence	Reduced
Orientation	Oriented with time and space
Speech	Delayed, Echolalia present.
Gait	Normal.

According to DSM-5 criteria (9) and Vanderbilt ADHD Diagnostic Rating Scale (10), with combined ADHD score of 36 in VADRS, the child was diagnosed with Predominantly Hyperactive-Impulsive subtype of ADHD.

Autism spectrum disorder was ruled out because the child did not show ongoing deficits in social communication or exhibit restricted and repetitive behaviors. Specific learning disorder was excluded since the academic difficulties were attributed to inattention and hyperactivity. Oppositional defiant disorder was dismissed due to the lack of a consistent pattern of defiant or hostile behavior. Other neurodevelopmental and related disorders were also thoroughly assessed and eliminated.

## Therapeutic interventions

After a detailed examination, the following medicines were used during outpatient and inpatient treatment. *Rajanyadi choornam* (11) was used for *Agni Deepana* (improving the digestive fire) and *Vata anulomana* (normalising movement of *vata dosha*). *Manasamitra vatakam* (12) is herbomineral preparation in Ayurveda used for psychiatric conditions and speech problems. *Aswagandharishtam* (13) was used to correct the lack of focus and alertness. It also improves the muscle and nerve strength. *Balahatadi tailam* (14) has *Pitta dosha* pacifying action. The ingredients of *Balahatadi tailam* collectively have *cold* properties, which help calm and reduce patient anger. It was used for head and body massage. *Mahatiktakam ghrita* (15) is *heavy, unctuous, and cold* in properties with a predominance of water and earth components of *panchamahabhuta*. It helps to pacify the *rajas mano-dosha*, *vata* and *pitta dosha*, which helps reduce the patient's anger and impulsive nature. *Tagara (Valeriana wallichii)* (16) tablet is used in psychiatric disorders. It helped to calm the patient, eventually reducing hyperactivity. It also induced standard sleep patterns in the patient. *Dhanwantaram Gulika* (17) normalises the movement of *vata dosha*, helping to reduce flatulence and improve gut motility. *Chandanadi Kashaya* (18) is indicated in brain-related disorders. It has a calming effect, helping to reduce hyperactivity and fickleness of mind.

*Shatapushpa choornam*, *Haridra khandam* (19), and *Vilwadi Gulika* (20) were used to treat adenoiditis and its associated symptoms and improve digestion and metabolism.

**Follow up**

In the second sitting of IP admission, a *Udwaranam* using *Triphala choornam* was performed to facilitate the removal of *Amadosha* (undigested metabolic waste or toxins) from the body's channels. *Abhyangam* was carried out using *Pindathailam*. This treatment aids in reducing *vata* imbalances. *Pinda thailam* is effective for conditions primarily influenced by *vata-pitta dosha* and helps reduce hyperactivity and temper outbursts. *Snehapanam* of *Mahatiktakam ghritam* was administered as a principal treatment in this case of *vata-pitta unmadam*. *Ksheeravasti prepared of panchatiktaka kashayam* was done. It is an enema that functions both in eliminating *dosha* and nourishing. *Ksheeradhara* with *panchatikthaka kashaya* and *maharasnadi kashaya* was poured continuously over the forehead and body in a rhythmic manner. It has a cooling effect on the head and body, helping to reduce temper tantrums and hyperactivity. *Sirolepam* with herbal paste made of *Balasohaladi* herbs was done. It provides tranquillity to the head and brain, soothes the mind, and nourishes the brain. It is found to be very helpful in psychiatric conditions. *Sirodhara* with *balaswagandhadi taila* and *valiya chandhanadi tailam* was done. *Sirodhara* relaxes the mind and calms the patient, helping to pacify *vata dosha* (21).

**Table 2: OP Management Timeline**

Date of visit	Presentation during visit	Interventions
05-01-2023	Hyperactivity Restlessness Poor attention span Poor scholastic performance Increased anger Highly obsessed to follow rules.	<i>Manasamitra vatakam</i> one tab with milk, once a day <i>Aswagandharishtam</i> 10ml, twice a day <i>Rajanayadi choornam</i> 2.5gm with honey, once a day <i>Balahatadi tailam</i> for external application over head and body <i>Mahatiktakam ghritam</i> 10ml before food, twice a day
23-02-2023	Reduced attention span Echolalia Anger increased Aggressive behaviour Prefers to play with fire	The patient was advised to Inpatient management.
13-06-2023	Restlessness persists Peer group interaction improved Become more calm Echolalia reduced Behavioural issues persist Impulsive behaviour presents occasionally	<i>Manasamitra vatakam</i> one tab with milk, once a day <i>Aswagandharishtam</i> 10ml, twice a day <i>Rajanayadi choornam</i> 2.5gm with honey, once a day <i>Tagara tablet</i> one tab once a day
23-08-2023	Behavioural issues persist Temper tantrums reduced	<i>Manasamitra vatakam</i> one tab with milk, once a day <i>Aswagandharishtam</i> 10ml, twice a day <i>Rajanayadi choornam</i> 2.5gm with honey, once a day <i>Tagara tablet</i> one tab once a day <i>Dhanwantaram gulika</i> one tab twice a day <i>Mahatiktaka ghritam</i> 10ml before food, twice a day

**Table 3: IP Management Timeline**

Date	Complaints/condition of patient	Therapeutic Intervention	
12-04-2023 to 05-05-2023	Hyperactivity Restlessness Echolalia Poor attention span Poor scholastic performance Easily getting angry Harming others Affinity to water	Internal medicine- <i>Rajanyadi choornam</i> 5gm at 4pm <i>Aswagandharishta</i> 10ml twice a day <i>Manasamitra vatakam</i> 1tab twice a day <i>Mahatiktaka ghritam</i> 10ml twice a day <i>Dhanwantharam gulika</i> 1tab twice a day	Procedures done- <i>Abhyagam</i> for 5 days <i>Takradhara</i> for 5 days <i>Ksheeravasti</i> for 3 days <i>Sirodhara</i> for 5 days <i>Marsha nasyam</i> for 5 days
06-01-2024 to 04-02-2024	Hyperactivity, Restlessness, Poor attention span, Poor scholastic performance, Adenoiditis	Internal medicine- <i>Aswagandharishta</i> 5ml twice a day <i>Manasamitra vatakam</i> 1tab twice a day <i>Shatapushpa choornam</i> 2pinch before food <i>Haridrakhadam granules</i> 2.5gm twice a day <i>Vilwadi Gulika</i> one tab twice a day <i>Chandanadi kashayam</i> 10ml with 30ml lukewarm water twice a day	Procedures done- <i>Udwaranam</i> with <i>Triphala choornam</i> for 2days <i>Abhyangam</i> with <i>Pinda thailam</i> for 7 days <i>Snehapanam</i> with <i>Mahatiktakam ghrita</i> for 7days <i>Ksheeravasti</i> with <i>Panchatiktaka kashaya</i> for 3 days <i>Ksheeradhara</i> for 7 days <i>Sirolepam</i> with <i>Balasohaladi lepam</i> for 11 days <i>Sirodhara</i> with <i>Valiya chandanadi thailam</i> and <i>Balaswagandhadi thailam</i> for 7 days

**Results**

The child was assessed using standardized tools to evaluate changes in ADHD severity. The Vanderbilt ADHD Diagnostic Rating Scale: Parent Informant, used to diagnose and assessment of ADHD, showed a reduction in combined ADHD values from 36 to 30. The patient was assessed both before and after treatment using the Conners' Parent Rating Scale (22). The score before treatment was 117, and after treatment, it decreased to 96, indicating significant improvement in the child's complaints.

**Table 4: Results**

Assesment tool	Pre treatment	Post treatment
VADRS	36	30
Conners' Parent rating scale	117	96

**Discussion**

The child presented with complaints of prominent hyperactivity, restlessness, and poor attention span. According to the DSM-5 criteria he was diagnosed with Predominantly Hyperactive-Impulsive ADHD.

The neurobehavioral perspective on the pathology of ADHD in contemporary medicine is an ongoing area of study. ADHD is fundamentally connected to several core areas of psychology, particularly in cognitive, behavioural, developmental, and

emotional domains. Individuals with ADHD often face challenges withholding information in their minds, controlling impulses, and shifting their attention between tasks. These difficulties are closely associated with neurological differences in the prefrontal cortex and frontostriatal pathways, crucial in regulating self-control and decision-making. A key component of psychological intervention for ADHD includes addressing self-esteem and emotional awareness through cognitive-behavioural therapy (CBT) (23).

In Ayurveda, *Tridosha* and *Triguna* govern the mind and body; the vitiation of these will cause an abnormality of both the psyche and body. In ADHD, the *vata dosha* is mainly vitiated, which also affects the *pitta* and *kapha dosha*. In the present case, the normal function of *vata* was affected, in turn leading to hyperactivity, restlessness, incoherent speech, and emaciation in the child. The function of *prana vayu* (a type of *vata*) was also affected, causing vitiation of intelligence. The function of *sadhak pitta* (a type of *pitta*) is affected, causing vitiation of *medha* (discriminative ability). In *manovaha srotas*, vitiation of *Rajoguna* caused hyperactivity and restlessness. In this case, the choice of drugs for treatment was determined according to the predominant dosha involvement and Ayurvedic treatment was found to be effective. Integrating behaviour therapy along with Ayurvedic management will help to improve the condition in a better way.

Several case studies have indicated that Ayurvedic treatments can lead to improvement in core symptoms of ADHD, providing a backdrop for the findings presented in the current report. For example, one Ayurvedic case study documented the application of *Kosthashodhana*, *Basti*, *Shirodhara*, and *Nasya* in a child diagnosed with attention-deficit/hyperactivity disorder, showing noticeable symptom reduction following a structured treatment plan and subsequent evaluations (24). Another single-case report noted significant improvement in a child exhibiting hyperactivity and a limited attention span after three months of a combined approach involving behavioral and Ayurvedic therapies (25). These reports underscore the promise of personalized Ayurvedic methods as supplementary or alternative options in the management of ADHD; however, direct comparisons are constrained by variations in treatment methods and assessment criteria.

This article focuses on a single case and the treatment started only at the age of 11 years, which is a delayed intervention in the management of developmental disorders in children. The assessments were done before and after 11 months, which is a short period of intervention for ADHD. Despite these limitations, the present case provides clinically meaningful observations regarding the potential role of Ayurvedic management in predominantly hyperactive ADHD. More extensive studies with control groups are required to understand the implications of the findings within a larger population.

## Conclusion

It has been observed that individuals diagnosed with ADHD during childhood often continue to experience symptoms throughout their life. However, in this case, Ayurvedic treatment was found to be effective in managing the hyperactive type of ADHD. The patient demonstrated significant improvement in behaviour, hyperactivity, restlessness, and reading and writing skills. This case study provides evidence that Ayurveda treatment can be safely and effectively used to manage ADHD.

There is growing interest in integrating Ayurvedic wisdom with modern psychological strategies to offer holistic management.

Mindfulness and yoga, rooted in Ayurveda, are being increasingly adopted in western psychology for ADHD. Herbal supplements are being researched for their nootropic and neuroprotective properties. Both systems emphasise early intervention, structured routines, and emotional support. However, scientific validation of Ayurvedic treatments through modern clinical trials remains limited.

## Declaration and patient consent

Authors certify that they have obtained a patient consent form from the caregiver, who has given consent for reporting the case in the journal. The caregiver understands that his name and initials will not be published and efforts will be made to cover the identity, but anonymity cannot be guaranteed.

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## References

1. Diagnostic and Statistical Manual of Mental disorders-Text Revision, DSM-5-TR, 5<sup>th</sup> edition, American Psychiatric Association, p. 70
2. Kliegman, Behrman, Jenson, Stanton, Nelson Textbook of Paediatrics, Vol I, 18<sup>th</sup> edition, by Saunders, an imprint of Elsevier, p. 146
3. Magnus W, Anilkumar AC, Shaban K. Attention Deficit Hyperactivity Disorder. [Updated 2023 Aug 8]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK441838/>
4. Shastri K. N., Chaturvedi G. N., Charaka Samhita of Agnivesa, Part II, In: Chikitsasthana, Chaukhamba Bharati Academy, Varanasi, Reprint 2007, p. 672
5. Shastri K. N., Chaturvedi G. N., Charaka Samhita of Agnivesa, Part I, In: Sarirasthana, Chaukhamba Bharati Academy, Varanasi, Reprint 2018, p. 803-806
6. Shastri K. N., Chaturvedi G. N., Charaka Samhita of Agnivesa, Part I, In: Sarirasthana, Chaukhamba Bharati Academy, Varanasi, Reprint 2018, p. 879
7. Shastri K. N., Chaturvedi G. N., Charaka Samhita of Agnivesa, Part I, In: Sarirasthana, Chaukhamba Bharati Academy, Varanasi, Reprint 2018, p. 805
8. Shastri K. N., Chaturvedi G. N., Charaka Samhita of Agnivesa, Part I, In: Nidanasthana, Chaukhamba Bharati Academy, Varanasi, Reprint 2018, p. 656
9. Diagnostic and Statistical Manual of Mental disorders-Text Revision, DSM-5-TR, 5<sup>th</sup> edition, American Psychiatric Association, p. 68
10. Vanderbilt ADHD Diagnostic Rating Scale (VADRS), *Mark L Wolraich*, 2002, American Academy of Pediatrics and National Initiative for Children's Healthcare Quality. <https://nichq.org/wp-content/uploads/2024/09/NICHQ-Vanderbilt-Assessment-Scales.pdf>, Date & Time accessed- 27 Jan. 2026, 12.20 pm.
11. Brahmanand Tripathi, Astanga Hrdayam of Srimad Vagbhata with Nirmala Hindi commentary, In: Uttarasthan, Chaukhamba Sanskrit Pratishthan, Delhi, Reprint 2019, p. 892.

12. Nishteswar K and Vidyanath R, Sahasrayogam, Gutika prakaran, Chowkhamba Sanskrit Series, Varanasi, Reprint ed 2023, p. 354
13. Kaviraj Govind Das Sen. Bhaisajya Ratnavali, edited by Mishra S, Murcha Rogadhikar, Chaukhamba Surbharati Prakashan, Varanasi, (Reprint ed.), 2018, p. 492
14. Nishteswar K and Vidyanath R, Sahasrayogam, Chowkhamba Sanskrit Series, Varanasi, Reprint ed 2023, p. 137
15. 15) Brahmanand Tripathi, Astanga Hridayam of Srimad Vagbhata with Nirmala Hindi commentary, In: Chikitsasthan, Chaukhamba Sanskrit Pratishthan, Delhi, Reprint 2019, p. 783.
16. Toolika, E., Bhat, N. P., & Shetty, S. K. (2015). A comparative clinical study on the effect of *Tagara (Valeriana wallichii DC.)* and *Jatamansi (Nardostachys jatamansi DC.)* in the management of Anidra (primary insomnia). *Ayu*, 36(1), p. 46–49. <https://doi.org/10.4103/0974-8520.169008>
17. Nishteswar K, Vidyanath R, Sahasrayogam, Gutika prakaran, Chowkhamba Sanskrit Series, Varanasi, Reprint ed 2023, p. 346
18. Kaviraj Govind Das Sen. Bhaisajya Ratnavali, edited by Mishra S, Mastishka chaya apachaya chikitsa 100/11-12, Chaukhamba Surbharati Prakashan, Varanasi, (Reprint ed.), 2018
19. Kaviraj Govind Das Sen. Bhaisajya Ratnavali, edited by Mishra S, Udarda sheetapitta kotha Rogadhikar, Chaukhamba Surbharati Prakashan, Varanasi, (Reprint ed.), 2018, p. 898
20. Brahmanand Tripathi, Astanga Hridayam of Srimad Vagbhata with Nirmala Hindi commentary, In: Uttarasthan, Chaukhamba Sanskrit Pratishthan, Delhi, Reprint 2019, p. 1163
21. Sharma, A., Sugandh, M., Bhardwaj, A., & Gupta, A. (2025). Role of Shirodhara and Abhyanga on serum cortisol in Anxiety - A case report. *Journal of Ayurveda and integrative medicine*, 16(1), 100948. <https://doi.org/10.1016/j.jaim.2024.100948>
22. Conners C Keith (1997), Conners Rating scales- Revised Technical Manual. Toronto, Ontario, Canada: Multi Health Systems.
23. Mei-Rong Pan, Fang Huang, Meng-Jie Zhao, Yan-Fei Wang, Yu-Feng Wang, Qiu-Jin Qian, A comparison of efficacy between cognitive behavioral therapy (CBT) and CBT combined with medication in adults with attention-deficit/hyperactivity disorder (ADHD), *Psychiatry Research*, Volume 279, 2019, Pages 23-33, ISSN 0165-1781, <https://doi.org/10.1016/j.psychres.2019.06.040>
24. Akshay Gurav, Jennifer D'souza. A Case Report on Ayurvedic Management of Attention Deficit Hyperactivity Disorder [ADHD] in Children . *J Ayurveda Integr Med Sci [Internet]*. 2022 Jul. 16 [cited 2026 Jan. 28];7(5):166-70. Available from: <https://jaims.in/jaims/article/view/1914>
25. Sheetal Sonwane, Kavita Fadnavis and Ankita Bobade. Ayurvedic management of ADHD: A single case report. *J Pharmacogn Phytochem* 2024;13(5):247-250. DOI: 10.22271/phyto.2024.v13.i5c.15079

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