# A case report of attention deficit hyperactivity disorder in preschool children treated with individualised, constitutional homoeopathic medicine

Karunakara Moorthi\* D, K. S. Lalitha

National Homoeopathy Research Institute in Mental Health, Kottayam, Kerala, India

#### **Abstract**

**Introduction:** Attention deficit hyperactivity disorder (ADHD) is a neuropsychiatric disorder affecting children of all ages, including preschoolers, adolescents, and adults worldwide. ADHD patients often face challenges in academic and social settings. Notably, pre-school children are more likely to exhibit hyperactive-impulsive symptoms than school-age children. Research on treating pre-schoolers with ADHD is limited compared to older children. This case report demonstrates the treatment of ADHD in pre-schoolers using individualised homoeopathic remedies. Case Summary: A 4-year-old boy presented with a 2-year history of symptoms, such as restlessness, easy distractibility and aggressive behaviour. After assessing the case, the institute's psychiatric consultant diagnosed it as ADHD, based on the DSM-5 criteria. The homoeopathic treatment with Medorrhinum 200C and 1M and Tarentula hispanica 200C resulted in improvement in his academic performance, interpersonal relationships, social interactions and behaviour, both at home and school. The ADHD Rating Scale score, also decreased gradually. The homoeopathic remedies were administered at monthly intervals for two years, and there was no symptom relapse after recovery. Further research with well-designed studies is needed to establish evidence for treating pre-school children with ADHD.

Keywords: Attention deficit hyperactivity disorder, ADHD Rating scale, Homoeopathy, Medorrhinum, Tarentula hispanica.

#### INTRODUCTION

Attention deficit hyperactivity disorder (ADHD) is a persistent condition that typically appears in early childhood, presenting with symptoms of inattention (IA) and hyperactivity or impulsivity. These symptoms can significantly impact a child's development across various domains. The clinical presentation of this disorder is diverse, and this heterogeneity makes it difficult to pinpoint the underlying causes and devise effective and individualised interventions that can modify developmental trajectories and the range of treatment outcomes.[1]

According to the Diagnostic and Statistical Manual of Mental Disorders-5th Edition (DSM-V),[2] ADHD is characterised by IA, hyperactivity, and impulsivity. In ICD-10, ADHD is used as the term "hyperkinetic disorder", and the cardinal features are impaired attention and hyperactivity.[3] The diagnostic guidelines specified in the ICD-10 and DSM-V classifications are considered for the diagnosis of ADHD in India.

The prevalence of ADHD in India among primary school children and pre-school children is reported at 6.3% and 12.2%, respectively.<sup>[4]</sup>

It has been evidenced that hyperactive-impulsive types of ADHD are more common among pre-school children than school-age children, while IA symptoms depict some psychopathology.<sup>[5,6]</sup> A study showed that according to the parents, the hyperactivity-impulsivity (HI) presentation of

> \*Address for correspondence: Karunakara Moorthi, National Homoeopathy Research Institute in Mental Health, Kottayam, Kerala, India. E-mail: dr.karunakaramoorthi@gmail.com

> > Received: 10 April 2023; Accepted: 16 May 2024

Access this article online **Quick Response Code:** Website: www.ijrh.org DOI:

10.53945/2320-7094.1870

attention deficit hyperactivity disorder in preschool children treated with individualised constitutional homoeopathic medicine. Indian J Res Homoeopathy 2024;18:99-109.

How to cite this article: Moorthi K, Lalitha KS. A case report of

This is an open access journal, and articles are distributed under the terms of the Creative

Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to

remix, tweak, and build upon the work non-commercially, as long as appropriate credit

is given and the new creations are licensed under the identical terms.

ADHD was most frequently observed in children at the age of 3 years and IA in children aged 8 years.<sup>[7]</sup>

Most children with ADHD continue to have symptoms and impairments through adolescence and into adulthood. According to a 2014 national survey, the median age of diagnosis was 7 years; approximately one-third of children were diagnosed before 6 years of age.<sup>[8]</sup> The prevalence of ADHD among adolescents and children in India generally aligns with global epidemiological figures and imposes a substantial morbidity burden on individuals under the age of 18.<sup>[9]</sup>

Significant levels of IA, impulsivity, and restlessness during childhood represent a significant risk for the later development of psychological disorders. These symptoms can have various underlying causes. A specific pattern characterised by pronounced and pervasive hyperactivity and poor concentration, without concurrent mood or psychotic disorders, is recognised as hyperkinetic syndrome. This syndrome is often linked to delays in the development of skills such as language and motor control.<sup>[10]</sup>

ADHD often co-occurs with common psychiatric conditions such as anxiety disorders, learning disorders, mood disorders, conduct disorders, autism spectrum disorder, disruptive behavioural disorders, and oppositional defiant disorder. When these comorbid conditions are present, the prognosis can be challenging, making the early diagnosis and treatment of children with ADHD essential.<sup>[11,12]</sup> All the comorbidities present with ADHD have had poor outcomes with the association of parent-child conflictual interactions, poor academic performance, risky behaviours, antisocial personality disorder and substance use.<sup>[13,14]</sup>

Behavioural interventions are indeed often considered the first-line treatment for preschool children (below 6 years) with ADHD.<sup>[15]</sup>

Despite the elevated risk of adverse effects associated with medications such as clonidine, atomoxetine, antipsychotics, stimulants and other drugs, they are still prescribed to preschool-age children. This is particularly concerning given the increased occurrence of adverse effects following the prescription of methylphenidate and atomoxetine among preschool children.<sup>[16]</sup>

Relatively few studies have followed pre-school children longitudinally to identify the consistency and changes in ADHD symptoms and related functional impairments in this age group. These children also commonly experience significant difficulties in their interactions with adults and peers.<sup>[1]</sup>

There are studies providing evidence to support the therapeutic effect of individualised homoeopathic medicine in ADHD children.<sup>[17-20]</sup>

This patient, falling into an unconventional age group, sought consultation in a clinical setting. Remarkably, the

patient showed significant improvement with continuous follow-up and no relapses. The exclusive treatment approach using homoeopathic medicine has encouraged us to consider publishing this case.

## PATIENT INFORMATION

A 4-year-old male child presented to the outpatient department of the National Homoeopathy Research Institute in Mental Health (NHRIMH), Kottayam, on March 12, 2020, with the complaints, such as restlessness, lack of concentration, easy distractibility, aggressive behaviour, anger when contradicted, handling genitals, frequently asking trifle questions and harming insects for two years. He was restless, ran around and was unable to sit quietly in a place for a while. He could not sustain attention while playing or speaking and never showed interest or listened to what others were saying, getting distracted easily. He used to lose or drop his things wherever he played. He never obeyed commands; instead, he did the opposite and was obstinate. He tended to hurt or disturb others until he got what he wished. He tended to break all the toys. He had the habit of touching his genitals frequently. He used to kill small insects often. He used to bite his nails. He moved from one activity work to another, quickly leaving all of them incomplete.

### **History of the present illness**

His presenting complaints were noticed after he started going to the child daycare (*Anganwadi*) two years ago. The teachers complained that he did not sit at a place quietly, disturbing other children around him. He used to push other children from behind and bite them. He started showing the same behaviour at home as well. His hands and feet were always in constant motion. He did not complete any task or play. He constantly asked about everything and was curious about things around him, such as how birds fly, why snails move slowly and how the bubbles are captured inside a glass paperweight.

He did not listen to what others said and disobeyed his parents. He did things as he liked and hurt others to get what he wanted. He did not keep his toys or things safe, destroyed everything, and put all things disorganised. Since his complaints worsened at school, home and outdoors, the parents brought the child to the institute.

He had no history of stealing, telling lies, playing with fire or defiant behaviour.

The patient's past medical history did not reveal any significant or specific issues.

The patient's family medical background included history of diabetes mellitus on his father's side, with his paternal grandfather having a history of alcoholism and some major depressive disorder. On the maternal side, there were no specific health issues reported for the maternal grandparents. There was no family history of ADHD.

During the prenatal period, his mother was emotionally distressed because her parents were against her love marriage. However, her parents arranged her marriage as she liked. The parents used to quarrel and hurt her verbally. She was emotionally upset and felt forsaken, helpless and angry because she had not gotten the love, care and affection she expected from her parents, but she did not express it. Her husband and in-laws were supportive.

The child was born through forceps delivery due to a reduced foetal heart rate near term. The baby's birth weight was 2.9 kg, he exhibited a healthy cry at birth, and he had an Apgar score of 9.

The postnatal history of the patient has been uneventful, and vaccinations have been administered as recommended. Weaning commenced at the age of 1 and a half years.

The patient reportedly achieved each developmental milestone within the expected timeframe.

## Life space investigation

The patient was raised in Kerala. He was the only child of his parents. His paternal grandparents were notably protective and indulgent, always offering support and refraining from allowing his parents to scold or punish him for his mistakes. He generally enjoyed a good relationship with his family. However, he occasionally became apprehensive of his father, as his father scolded him for mistakes. He used to take pleasure in playing with children of a similar age but tended to be possessive when it came to his toys. He became overtly aggressive on seeing someone touching his toys. The patient exhibited a curiosity for watching cartoons and occasionally mimiced gestures and sounds reminiscent of cartoon characters. He commenced attending Anganwadi at the age of two and a half years. At 4 years old, his early childhood was largely uneventful, marked by a close and pampered relationship with his parents and grandparents. No significant life events were noted during this time. Notably, the patient's behavioural changes were observed following his enrollment in Anganwadi. His overall physical health remained normal.

#### **Physical generals**

He had a reduced appetite, and his perspiration was profuse on his head. He liked chocolate, ice, milk and sweets. The patient was thermally hot.

#### **Mentals**

Curious and malicious behaviour, which included biting nails, destructiveness and disobedience and his cruelty toward animals and obstinate nature.

#### **General physical examination**

The patient was well nourished. His built was adequate for his age. He was neither anaemic nor icteric.

#### **Clinical findings**

The ADHD Rating Scale IV preschool version<sup>[21]</sup> score was calculated to be 47. The mental status examination was

done during his first consultation, and the patient was found to be well-kempt, oriented and aware of his surroundings. He established rapport with the physician and asked him many questions. He maintained eye-to-eye contact. His interpersonal relationships appeared satisfactory. He had increased psychomotor activity. His speech was relevant. He had an appropriate affect. His mood was dysphoric. He had wandering thoughts without any other perceptual disorder. He had an average memory and general information. His attention and concentration were poor. He also had poor insight.

#### **Diagnostic assessment**

The essential features of attention-deficit/hyperactivity disorder, like the persistent pattern of IA and/or HI that interferes with the functioning or development of the child, easy distractibility, and aggressive behaviour, were present in the case. The manifestations of the disorder were present in at least more than one setting (home, school). The diagnostic method used for this patient was the ADHD Rating Scale. Considering all the presenting complaints persisting for more than two years in this child, the psychiatric consultant of the institute diagnosed the case as ADHD as per the Diagnostic and Statistical Manual of Mental Disorders-V (DSM-V).

#### **Therapeutic intervention**

The patient was administered individualised homoeopathic medicine, *Medorrhinum* 200 C, 1 dose, as the first prescription. Then *Tarentula hispanica* 200 C was prescribed at frequent intervals, according to the improvement of the symptoms, for two years. The medicines were prescribed for a limited duration as per the need and was followed by placebo pills for rest of the period.

## Follow-up and outcomes

The analysis of the case took into account the symptoms described by the parents, as well as those noted by the physician and the symptoms noted by bystanders conveyed by the parents. The totality of the case was built by considering various symptoms, including restlessness, destructiveness, aversion to contradiction, disobedience, obstinacy, cruelty toward animals and lack of concentration, in determining the most appropriate remedy through repertorisation. The patient's follow-up details are depicted in Table 1.

A repertorial chart is shown in Figure 1. Over 24 months, regular follow-ups and scale assessments were conducted for the case. The improvements were evident to the physician, and the child's parents, and teachers during this time. The child's behaviour transformed gradually with a noticeable reduction in his violent and aggressive tendencies. There was a marked improvement in restlessness and destructive behaviour as well. The mother perceived a gradual reduction in the time and effort required a gradual reduction in the time and effort required take care of the child. The patient became calmer, more obedient, and more cooperative with everyone. The changes in the child's symptoms following medication significantly eased the burden and stress on the parents.

Date of visit	Indication for prescription	Medicine with doses, repetition	Changes in symptomatology	ADHD scale score
12 March 2020 Baseline visit	Repertorial totality with the consultation of Materia Medica.  He Frequently asked trifle questions.  He kept moving or running, squirming in place, and impossible to sit quietly in a place for a while.  He was unable to sustain attention or focus while playing or speaking and never showed interest or listened to what others said.  He got distracted easily.  He lost or dropped his things wherever he played.  He had not shown interest in engaging in a task or playing continuously.  Never obeyed others. He was very obstinate.  He tended to hurt or disturb others until he got what he wished for.  He tended to break all the toys.  He had the habit of touching his genitals frequently.  He had the habit of killing small insects.  He had habit of Nail biting.  He engaged many activities and moved from one work to another, and he kept all	Medorrhinum 200C/1 dose followed by Placebo for 30 days.	Nothing specific.	42 42
12 May 2020	of them incomplete.	Medorrhinum 200C/1 dose followed by Placebo for 30 days	Disobedience same.  Mild improvement in habit of touching of genitals.	
02 June 2020		Medorrhinum 200C/1 dose followed by Placebo for 30 days	No progress in the remaining symptoms.  Cruelty toward animals persisted.  Anger and irritability reduced mildly.  Disobedience decreased slightly.  Tendency to hurt others and sudden anger outbursts mildly reduced.  Tendency to touch genitals reduced mildly.	
02 July 2020		Medorrhinum 200C/1 dose followed by Placebo for 30 days	Killing small insects persisting. Restlessness persisting. Mild improvement in disobedience; irritability and anger mildly reduced. Tendency to hurt others reduced moderately. Touching genitals decreased markedly.	33
13 August 2020		Medorrhinum 1M/1 dose followed by Placebo for 30 days	Killing small insects persisting. Still not showing interest in engaging in a task. Restlessness slightly reduced. Hurting tendency toward others decreased moderately. Touching of genitals absent.	
03 September 2020		Medorrhinum 1M/1 dose followed by Placebo for 30 days	Anger and irritability reduced markedly. Disobedience decreased moderately. Cruelty toward animals reduced mildly. The patient remains calm.	

(Contd...)

Table 1: (Continued)							
Date of visit	Indication for prescription	Medicine with doses, repetition	Changes in symptomatology	ADHD scale score			
03 October 2020	Improvement was persisting.	No medicine was prescribed as improvement continued.	Disobedience reduced markedly. Restlessness decreased moderately. Cruelty toward animals reduced mildly. Touching of genitals absent.	25			
05 November 2020	Feels better. Improvement was persisting.	No medicine was prescribed as improvement continued.	Answering appropriately.  Killing insects reduced than before.  Restlessness reduced. Hurting tendency toward others decreased moderately.				
03 December 2020	Improvement was persisting.	No medicine was prescribed as improvement continued.	Hurting tendency reduced moderately. Restlessness decreased moderately. Not killing insects anymore. Touching genitals absent.				
07 January 2021	Improvement was persisting.	No medicine was prescribed as improvement continued.	Restlessness was reduced moderately. Hurting himself and others reduced moderately. Touching the genitals absent. Cruelty	12			
03 February 2021	Improvement was persisting.	No medicine was prescribed as improvement continued.	toward animals absent.  Restlessness reduced moderately.  Hurting himself and others reduced moderately.  Not killing insects. Better in school.				
03 March 2021	Improvement was persisting.	No medicine was prescribed as improvement continued.	No abnormal behavioural changes noticed.				
13 April 2021	Though the symptoms' severity has reduced, the patient couldn't obtain complete relief So to give complete relief from symptoms <i>Tarentula</i> was selected based on his mother's emotions during her pregnancy period.	Tarent.h 200C/1 dose followed by Sac lac for 30 days.	Restlessness slightly present when contradicting him. Beatens his parents sometimes. Not showing interest in engaging in tasks continuously. The destruction things present. Disobedience present when angry.	4			
15 May 2021 to 16 August 2021	No specific complaints. Improvement persisting.	Tarent.h 200C/3 doses kept as SOS and Placebo for 3 months.	Touching of the genitals absent.  Still killing insects sometimes.  Restlessness reduced. Hurting tendency reduced. Engaging in tasks for a longer time. Anger outbursts better.  Disobedience reduced.				
17 August 2021 to 17 November 2021	No specific complaints. Improvement persisting.	Tarent.h 200C/3 doses (SOS) for 3 months followed by Placebo for 3 months		0			
2021			Anger outbursts reduced. Killing insects – Nil.				
18 November 2021 to 16 February 2022	No specific complaints. Improvement persisting. Sociability and communication have improved well.	SOS not taken. <i>Tarent.h</i> 200C/3 doses (SOS) and Placebo for 3 months.	Disobedience reduced markedly Anger – absent Irritability – absent Changeable mood – absent Touching the genitals – absent Killing the insects – absent His generals good. Studying well. Regularly attending his classes; and obedient.	0			
17 February 2021 to 07 April 2022	Asymptomatic	SOS not taken. <i>Tarent.h</i> 200C/3 doses (SOS) and Placebo for 2 months.	Socially and functionally doing well.				
	The patient is in remission. (From February 2021 to July 2022 patient c During this period, the patient was under Pl aggressive episodes occurred)			0			

SOS: Medicine if necessary, ADHD: Attention deficit hyperactivity disorder

## DISCUSSION

ADHD has been an early emerging disorder since childhood, with causative influences from the genetic domain, conception, social context, and environmental factors. Its course and development are variable. The course of ADHD symptoms in a child depends on the cause and the support from the family. The role of the bystander and the family in ADHD children is very crucial, as they are unaware of their behavioural changes and disturbances. The prognosis of symptoms into adolescence or adulthood may lead to the development of many comorbid conditions or other psychiatric conditions like antisocial behaviour and delinquency. [22] Hence, treatment for ADHD and its diagnosis is essential at the earliest. Since many studies

have proved that the HI type of ADHD is more common in preschool children than the inattentive type, focusing on treating prominent symptoms will help in a good prognosis. [23,24] So individualising the patient with prominent symptoms is essential, which is the core component of Homoeopathy. In this case, the significant symptoms with his expression were considered to reach a simillimum. The patient was followed up regularly for two years, and it helped to observe the child.

The child was prescribed *Medorrhinum* considering his extreme behaviour, such as increased restlessness, cruelty, handling genitals, disobedience, undertaking many things but persevering nothing, curious behaviour and a tendency to hurt others. Physical generals were not remarkable enough to be included in the construction of the totality of the case.

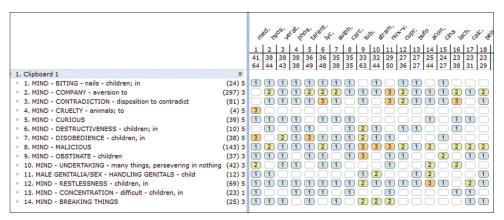


Figure 1: Repertorial chart

S. No.	Domain	Base line score	3 <sup>rd</sup> month	6 <sup>th</sup> month	9 <sup>th</sup> month	12 <sup>th</sup> month	15 <sup>th</sup> month	18 <sup>th</sup> month	21 <sup>st</sup> month	24 <sup>th</sup> month
1.	Fails to give close attention to details	3	3	2	1	0	0	0	0	0
2	Fidgets with hands or feet or squirms in seat	3	3	2	1	0	0	0	0	0
3	Has difficulty sustaining attention in task or play activities	3	2	2	1	0	0	0	0	0
4	Leaves seat in classroom, during meal or in other situations in which remaining seated is expected	3	2	2	1	0	0	0	0	0
5	Does not seem to listen when spoken to directly	3	2	1	0	0	0	0	0	0
6	Runs about or climbs excessively in situations in which it is inappropriate	2	2	2	1	0	0	0	0	0
7	Does not follow through on instruction or falls to finish tasks	3	2	2	1	1	0	0	0	0
8	Has difficulty playing quietly	2	2	1	1	0	0	0	0	0
9	Has difficulty organising task and activities	3	2	2	1	0	0	0	0	0
10	Is on the go or act as if driven by a motor	3	2	2	1	0	0	0	0	0
11	Avoids tasks that require sustained mental effort	2	1	0	0	0	0	0	0	0
12	Talks excessively	1	1	0	0	0	0	0	0	0
13	Loses things necessary for tasks or activities	3	3	2	1	1	0	0	0	0
14	Blurts out answers before questions have been completed	0	0	0	0	0	0	0	0	0
15	Is easily distracted	2	2	1	0	0	0	0	0	0
16	Has difficulty awaiting turn	2	1	1	0	0	0	0	0	0
17	Is forgetful in daily activities	2	1	2	1	1	0	0	0	0
18	Interrupts or intrudes on others	2	2	1	1	1	0	0	0	0
Total		42	33	25	12	04	00	0	0	0

ADHD: Attention deficit hyperactivity disorder

Table 3: ADHD rating scale IV-Preschool version - Teachers version S. **Domain Baseline** 9<sup>th</sup> 12<sup>th</sup> 15<sup>th</sup> 18<sup>th</sup> 21st 24th No. score month month month month month month month month 1. Fails to give close attention to details Fidgets with hands or feet or squirms in seat Has difficulty sustaining attention in task or play activities Leaves seat in classroom, during meal or in other situations in which remaining seated is expected Does not seem to listen when spoken to directly Runs about or climbs excessively in situations in which it is inappropriate Does not follow through on instruction or falls to finish tasks Has difficulty playing quietly Has difficulty organising task and activities Is on the go or act as if driven by a motor Avoids tasks that require sustained mental effort Talks excessively Loses things necessary for tasks or activities Blurts out answers before questions have been completed Is easily distracted Has difficulty awaiting turn Is forgetful in daily activities Interrupts or intrudes on others Total 

ADHD: Attention deficit hyperactivity disorder

Table	e 4: Overall improvement of sympto	oms							
S. No.	Presenting symptoms	3 <sup>rd</sup> month	6 <sup>th</sup> month	9 <sup>th</sup> month	12 <sup>th</sup> month	15 <sup>th</sup> month	18 <sup>th</sup> month	21 <sup>st</sup> month	24 <sup>th</sup> month
1	He frequently asks trifle questions.	Same	Reduced Well	Shown marked improvement	Nil	Nil	Nil	Nil	Nil
2	He Keeps on moving or running or squirms in a place and impossible to sit quiet in a place for a while	Same	Moderate improvement	Moderate improvement	Slightly increased	Reduced	Reduced well	Nil	Nil
3	Unable to sustain attention or focus while playing or speaking and never shows interest or listens to what others are saying	Same	Mild improvement	Reduced Well	Increased	Mild Improvement	Reduced well	Nil	Nil
4	Gets distracted easily	Same	Mild improvement	Reduced Well	Increased	Reduced well	Reduced well	Nil	Nil
5	Loses or drops his things wherever he plays	Same	Improved	Reduced Well	Nil	Nil	Nil	Nil	Nil
6	Doesn't show interest to engage in a task or play continuously	Reduced	Reduced Well	Reduced Well	Present mildly	Reduced moderately	Nil	Nil	Nil
7	Never obey others and very obstinate	Reduced	Reduced markedly	Reduced	Increased	Mild improvement	Reduced well	Reduced well	Nil
8	Tendency to hurt or disturb others until he gets what he wishes for	Reduced	Same	Moderate improvement	Increased	Reduced well	Reduced well	Nil	Nil
9	Tendency to break all the toys	Same	Nil	Nil	Increased	Reduced well	Nil	Nil	Nil
10	He has the habit of touching his genitals frequently	Reduced markedly	Nil	Nil	Nil	Nil	Nil	Nil	Nil
11	He has the habit of killing small insects	Same	Mild improvement	Nil	Nil	Slightly present	Nil	Nil	Nil
12	Nail biting	Same	Mild improvement	Reduced	Reduced well	Reduced well	Nil	Nil	Nil
13	Does many activities but moves from one work to another, keeping all of them incomplete	Same	Same	Mild improvement	Reduced	Reduced	Improved	Nil	Nil

Though the symptom severity diminished, abnormal behaviour of the patient continued. So, for complete relief, *Tarentula hispanica* was selected based on his mother's emotions during her pregnancy. It was also suggested in the repertorial chart in the 5<sup>th</sup> position.

This medicine was selected considering the mother's history of unrequited love undergone during her pregnancy, where she had not received the love and affection she expected from her parents, which is the central theme in *Tarentula hispanica*. [25]

Pregnancy is a period characterised by significant psychological changes, and pregnant women may be more susceptible to the onset of perinatal mental health disorders. The prenatal phase is particularly critical for the child's brain development and is recognised as a vulnerable period with the potential for lasting impacts on brain development and subsequent changes in behaviour. These changes can have implications for the physical and psychiatric health of the child when exposed to various forms of stress. Research indicates that maternal stress during pregnancy is associated with an increased risk of ADHD in children. [27]

In this case, the patient got complete relief of symptoms only after taking *Tarentula hispanica*, which was prescribed based on his mother's pregnancy history.

The improvement of the child was assessed with the help of the ADHD Rating Scale IV-Preschool version—Parents Version and Teacher Version—for 24 months, continuously depicted in Tables 2 and 3, respectively. There was a significant change in the scores in both versions [Tables 2 and 3]. The overall assessment of the improvement in symptoms of the patient by comparing his presenting complaints within a 2-year follow-up period has been tabulated in Table 4.

This evidence-based case report shows the effectiveness of homoeopathic medicines in treating behavioural symptoms of ADHD in children of pre-school age. Many researchers have given evidence that pre-school children are more prone to develop secondary psychiatric conditions such as antisocial personality disorder, delinquency and conduct disorder. In their due course, early diagnosis and treatment of children in their developmental stage is an essential aspect of treating ADHD in children.<sup>[28]</sup>

## CONCLUSION

The outcomes of psychological changes during pregnancy underscore the crucial influence of maternal emotions on both maternal and childhood development. The potential positive impact of homoeopathic medicine in addressing the mind-body connection rooted in maternal emotions is promising. It is imperative that future research, utilising well-structured study designs, be conducted to establish the evidence supporting the use of individualised homoeopathic remedies, especially in pre-school children.

#### **ACKNOWLEDGEMENT**

The authors are thankful to Dr. K.C. Muraleedharan, Officer-in-Charge, and Dr N. D. Mohan, Consultant Psychiatrist, National Homoeopathy Research Institute in Mental Health, Kerala, for their guidance.

## **Declaration of patient consent**

The authors certify that a written consent was taken from the parents for anonymously using his clinical information in scientific research publications.

### **Financial support and sponsorship**

Nil

#### **Conflict of interest**

None declared.

#### REFERENCES

- O'Neill S, Rajendran K, Mahbubani SM, Halperin JM. Preschool predictors of ADHD symptoms and impairment during childhood and adolescence. Curr Psychiatry Rep 2017;19:95.
- American Psychiatric Association Staff. Diagnostic and Statistical Manual of Mental Disorders. 5th ed. Washington, DC: American Psychiatric Association; 1994. p. 59-60.
- World Health Organization. The ICD Classification of Mental and Behavioural Disorders. 10th ed. New Delhi: A.I.T.B.S Publications & Distributors; 2007.
- Sharma P, Gupta RK, Banal R, Majeed M, Kumari R, Langer B, et al Prevalence and correlates of attention deficit hyperactive disorder (ADHD) risk factors among school children in a rural area of North India. J Family Med Prim Care 2020;9:115.
- Lahey BB, Pelham WE, Loney J, Lee SS, Willcutt E. Instability of the DSM-IV subtypes of ADHD from preschool through elementary school. Arch Gen Psychiatry 2005;62:896-902.
- Smidts DP, Oosterlaan J. How common are symptoms of ADHD in typically developing preschoolers? A study on prevalence rates and prenatal/demographic risk factors. Cortex 2007;43:710-7.
- Biederman J, Petty CR, Clarke A, Lomedico A, Faraone SV. Predictors of persistent ADHD: An 11-year follow-up study. J Psychiatr Res 2011;45:150-5.
- Venkata JA, Panicker AS. Prevalence of attention deficit hyperactivity disorder in primary school children. Indian J Psychiatry 2013;55:338-42.
- Vaidyanathan S, Rajan TM, Chandrasekaran V, Kandasamy P. Preschool attention deficit hyperactivity disorder: 12 weeks prospective study. Asian J Psychiatry 2020;48:101903.
- 10. Solmi M, Fornaro M, Ostinelli EG, Zangani C, Croatto G, Monaco F, et al. Safety of 80 antidepressants, antipsychotics, anti-attention-deficit/hyperactivity medications, and mood stabilizers in children and adolescents with psychiatric disorders: A large-scale systematic metareview of 78 adverse effects. World Psychiatry 2020;19:214-32.
- Egger HL, Kondo D, Angold A. The epidemiology and diagnostic issues in preschool attention-deficit/hyperactivity disorder: A review. Infants Young Child 2006;19:109-22.
- Elm Tree Clinic. Preschool ADHD Questionnaire. Available from: https://elmtreeclinic.ca/handouts/ADHD/Preschool%20ADHD%20 questionnaire.pdf [Last accessed on 2024 Feb 19].
- Dobrean A, Păsărelu CR, Balazsi R, Predescu E. Measurement invariance of the ADHD rating scale-IV home and school versions across age, gender, clinical status, and informant. Assessment 2021;28:86-99.
- Gnanavel S, Sharma P, Kaushal P, Hussain S. Attention deficit hyperactivity disorder and comorbidity: A review of literature. World J Clin Cases 2019;7:2420.
- Miranda A, Soriano M, Fernández I, Meliá A. Emotional and behavioral problems in children with attention deficit-hyperactivity disorder: Impact

- of age and learning disabilities. Learn Disabil Q 2008;31:171-85.
- Barkley RA, Fischer M, Smallish L, Fletcher K. Young adult followup of hyperactive children: antisocial activities and drug use. J Child Psychol Psychiatry 2004;45:195-211.
- Lamont J. Homoeopathic treatment of attention deficit hyperactivity disorder: A controlled study. Br Homeopath J 1997;86:196-200.
- Oberai P, Gopinadhan S, Varanasi R, Mishra A, Singh V, Nayak C. Homoeopathic management of attention deficit hyperactivity disorder: A randomized placebo-controlled pilot trial. Indian J Res Homoeopathy 2013;7:158-67.
- Frei H, Everts R, von Ammon K, Kaufmann F, Walther D, Hsu-Schmitz SF, et al. Homeopathic treatment of children with attention deficit hyperactivity disorder: A randomized, double-blind, placebocontrolled crossover trial. Eur J Pediatr 2005;164:758-67.
- Heirs M, Dean ME. Homeopathy for attention deficit/hyperactivity disorder or hyperkinetic disorder. Cochrane Database Syst Rev 2007;4:CD005648.
- McGoey KE, DuPaul GJ, Haley E, Shelton TL. Parent and teacher ratings of attention-deficit/hyperactivity disorder in preschool: The ADHD rating scaleIV preschool version. J Psychopathol Behav Assess 2007;29:269-76.

- Sarkhel S. Kaplan and Sadock's synopsis of psychiatry: Behavioral sciences/clinical psychiatry. 10<sup>th</sup> edition. Indian J Psychiatry 2009;51:331.
- Magnus W, Nazir S, Anilkumar AC, Shaban K. Attention Deficit Hyperactivity Disorder (ADHD). Treasure Island, FL: StatPearls Publishing LLC; 2020.
- Storebø OJ, Simonsen E. The association between ADHD and antisocial personality disorder (ASPD): A review. J Atten Disord 2016;20:815-24.
- Phatak SR. Materia Medica of Homoeopathic Medicines. New Delhi: B. Jain Publishers; 2002.
- Kinsella MT, Monk C. Impact of maternal stress, depression and anxiety on fetal neurobehavioral development. Clin Obstet Gynecol 2009;52:425-40.
- Grizenko N, Fortier ME, Zadorozny C, Thakur G, Schmitz N, Duval R, et al Maternal stress during pregnancy, ADHD symptomatology in children and genotype: Gene-environment interaction. J Can Acad Child Adolesc Psychiatry 2012;21:9-15.
- Moukhtarian TR, Mintah RS, Moran P, Asherson P. Emotion dysregulation in attention-deficit/hyperactivity disorder and borderline personality disorder. Borderline Personal Disord Emot Dysregul 2018;5:9.

## Un rapport de cas sur le trouble déficitaire de l'attention avec hyperactivité chez les enfants d'âge préscolaire traités par la médecine homéopathique individualisée et constitutionnelle

Introduction: Le trouble déficitaire de l'attention avec hyperactivité (TDAH) est un trouble neuropsychiatrique qui touche les enfants de tous âges, y compris les enfants d'âge préscolaire, les adolescents et les adultes du monde entier. Les patients atteints de TDAH sont souvent confrontés à des défis dans les milieux académiques et sociaux. Notamment, les enfants d'âge préscolaire sont plus susceptibles de présenter des symptômes d'hyperactivité-impulsivité que les enfants d'âge scolaire. La recherche sur le traitement des enfants d'âge préscolaire atteints de TDAH est limitée par rapport aux enfants plus âgés. Ce rapport de cas démontre le traitement du TDAH chez les enfants d'âge préscolaire à l'aide de remèdes homéopathiques individualisés. Résumé de cas: Un garçon de 4 ans présentait des symptômes depuis 2 ans, tels que de l'agitation, une distraction facile et un comportement agressif. Après avoir évalué le cas, le consultant psychiatrique de l'institut l'a diagnostiqué comme un TDAH, sur la base des critères du DSM-5. Le traitement homéopathique avec *Medorrhinum* 200C et 1M et *Tarentula hispanica* 200C a entraîné une amélioration de ses résultats scolaires, de ses relations interpersonnelles, de ses interactions sociales et de son comportement, tant à la maison qu'à l'école. Les scores de l'échelle d'évaluation du TDAH ont également diminué progressivement. Les remèdes homéopathiques ont été administrés à intervalles mensuels pendant deux ans, et il n'y a pas eu de rechute des symptômes après la guérison. D'autres recherches avec des études bien conçues sont nécessaires pour établir des preuves pour le traitement des enfants d'âge préscolaire atteints de TDAH.

## Ein Fallbericht über eine Aufmerksamkeitsdefizit-Hyperaktivitätsstörung bei Kindern im Vorschulalter, die mit individualisierter, konstitutioneller homöopathischer Medizin behandelt wurden

Einleitung: Die Aufmerksamkeitsdefizit-Hyperaktivitätsstörung (ADHS) ist eine neuropsychiatrische Störung, die Kinder jeden Alters betrifft, einschließlich Vorschulkinder, Jugendliche und Erwachsene weltweit. ADHS-Patienten stehen oft vor Herausforderungen im akademischen und sozialen Umfeld. Bemerkenswert ist, dass Kinder im Vorschulalter häufiger hyperaktivimpulsive Symptome aufweisen als Kinder im schulpflichtigen Alter. Die Forschung zur Behandlung von Vorschulkindern mit ADHS ist im Vergleich zu älteren Kindern begrenzt. Dieser Fallbericht zeigt die Behandlung von ADHS bei Vorschulkindern mit individualisierten homöopathischen Mitteln. Fallzusammenfassung: Ein 4-jähriger Junge hatte eine 2-jährige Vorgeschichte von Symptomen wie Unruhe, leichte Ablenkbarkeit und aggressives Verhalten. Nach der Beurteilung des Falles diagnostizierte der psychiatrische Berater des Instituts auf der Grundlage der DSM-5-Kriterien ADHS. Die homöopathische Behandlung mit Medorrhinum 200C und 1M und Tarentula hispanica 200C führte zu einer Verbesserung seiner schulischen Leistungen, zwischenmenschlichen Beziehungen, sozialen Interaktionen und seines Verhaltens, sowohl zu Hause als auch in der Schule. Auch die ADHS-Bewertungsskala nahm allmählich ab. Die homöopathischen Mittel wurden zwei Jahre lang in monatlichen Abständen verabreicht, und es gab keinen Symptomrückfall nach der Genesung. Weitere Forschung mit gut konzipierten Studien ist erforderlich, um Beweise für die Behandlung von Vorschulkindern mit ADHS zu finden.

## पूर्वस्कृली बच्चों में अटेंशन डेफिसिट हाइपरएक्टिविटी डिसऑर्डर कॉन्स्टिट्यूश्न्ल्यक्तिगत, होम्योपैथी इलाज की एक केस रिपोर्ट

परिचय: अटेंशन डेफिसिट हाइपरएक्टिविटी डिसऑर्डर (ADHD) एक न्यूरोसाइकेट्रिक डिसऑर्डर है जो दुनिया भर में प्री-स्कूलर्स, किशोरों और वयस्कों सिहत सभी उम्र के बच्चों को प्रभावित करता है। ADHD रोगियों को अक्सर शैक्षणिक और सामाजिक व्यवस्था में चुनैतियों का सामना करना पड़ता है। विशेष रूप से, पूर्व-विद्यालय के बच्चों में स्कूली उम्र के बच्चों की तुलना में अति सिक्रय-आवेगी लक्षण प्रदर्शित होने की अधिक संभावना होती है। ADHD से ग्रस्त प्री-स्कूलर्स के इलाज पर बड़े बच्चों की तुलना में शोध सीमित है। यह केस रिपोर्ट व्यक्तिगत होम्योपैथी से प्री-स्कूलर्स में ADHD के उपचार को प्रदर्शित करती है। केस सारांश: एक 4 वर्षीय लड़का जिसमे 2 साल से ADHD लक्षण हैं जैसे कि बेचैनी, आसान विचलितता और आक्रामक व्यवहार शामिल थे ,ओपीडी में इलाज के लिए लाया गया। मामले का आकलन करने के बाद, संस्थान के मनोरोग सलाहकार ने डीएसएम -5 मानदंडों के आधार पर इसे ADHD के रूप में निदान किया। मेडोराईनम 200 C और 1M और टेरेंटुला हिस्पैनिका 200 C के साथ होम्योपैथी उपचार के परिणामस्वरूप घर और स्कूल दोनों में उनके शैक्षणिक प्रदर्शन, पारस्परिक संबंध व सामाजिक संबंधों और व्यवहार में सुधार हुआ। ADHD रेटिंग स्केल का स्कोर भी धीरे-धीरे कम हो गया। होम्योपैथी के बाद कोई ADHD सम्बन्धी लक्षण नहीं था। ADHD के साथ पूर्व-विद्यालय के बच्चों के इलाज के लिए सबूत स्थापित करने के लिए और निपूण अध्ययनों की आवश्यकता है।

# Reporte de un caso de trastorno por déficit de atención con hiperactividad en niños en edad preescolar tratados con medicina homeopática constitucional individualizada

**Introducción:** El trastorno por déficit de atención con hiperactividad (TDAH) es un trastorno neuropsiquiátrico que afecta a niños de todas las edades, incluidos preescolares, adolescentes y adultos de todo el mundo. Los pacientes con TDAH a menudo enfrentan desafíos en entornos académicos y sociales. En particular, los niños en edad preescolar tienen más probabilidades de presentar síntomas hiperactivos-impulsivos que los niños en edad escolar. La investigación sobre el tratamiento de niños en

edad preescolar con TDAH es limitada en comparación con los niños mayores. Este caso clínico demuestra el tratamiento del TDAH en niños en edad preescolar mediante el uso de remedios homeopáticos individualizados. **Resumen del caso:** Un niño de 4 años presentó una historia de síntomas de 2 años, como inquietud, distracción fácil y comportamiento agresivo. Después de evaluar el caso, el consultor psiquiátrico del instituto lo diagnosticó como TDAH, según los criterios del DSM-5. El tratamiento homeopático con *Medorrhinum* 200C y 1M y *Tarentula hispanica* 200C resultó en una mejoría en su rendimiento académico, relaciones interpersonales, interacciones sociales y comportamiento, tanto en el hogar como en la escuela. Las puntuaciones de la Escala de Valoración del TDAH también disminuyeron gradualmente. Los remedios homeopáticos se administraron a intervalos mensuales durante dos años, y no hubo recaída de los síntomas después de la recuperación. Se necesita más investigación con estudios bien diseñados para establecer evidencia para el tratamiento de niños en edad preescolar con TDAH.

## 接受个体化宪法顺势疗法治疗的学龄前儿童注意力缺陷多动障碍的病例报告

**简介:**注意力缺陷多动障碍(ADHD)是一种神经精神疾病,影响全球所有年龄段的儿童,包括学龄前儿童、青少年和成人。多动症患者经常在学术和社交环境中面临挑战。值得注意的是,学龄前儿童比学龄儿童更容易表现出多动冲动症状。与年龄较大的儿童相比,治疗患有多动症的学龄前儿童的研究有限。本病例报告展示了使用个性化顺势疗法治疗学龄前儿童的多动症。**病例摘要:**一名 4 岁男童,有 2 年症状史,如烦躁不安、易分心和攻击性行为。在评估了该病例后,该研究所的精神病学顾问根据DSM-5标准将其诊断为ADHD。Medorrhinum 200C 和 1M 以及 Tarentula hispanica 200C 的顺势疗法治疗改善了他的学习成绩、人际关系、社交互动和行为,无论是在家庭还是学校。ADHD评定量表的分数也逐渐下降。顺势疗法每月给药一次,持续两年,康复后没有症状复发。需要进一步研究精心设计的研究,以建立治疗学龄前儿童多动症的证据。