Section: Psychiatry

Case Series

EMOTIONAL DYSREGULATION IN ADULTS WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER: A CASE SERIES

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ABSTRACT

Emotional dysregulation (ED) is increasingly recognized as a core yet often under-addressed feature of adult Attention-Deficit/Hyperactivity Disorder (ADHD). While traditionally conceptualized in the context of mood and personality disorders, ED in ADHD is characterized by heightened emotional reactivity, poor modulation of affect, and rapid mood shifts, contributing to significant functional impairment. **Objective:** This case series aims to illustrate the clinical presentation, psychosocial impact, and management challenges of ED in adults diagnosed with ADHD.

All cases of Adult ADHD exhibited prominent ED symptoms, including irritability, low frustration tolerance, and difficulty recovering from negative affect, as assessed through clinical interviews and validated rating scales. Across cases, ED manifested as rapid escalation of anger, disproportionate emotional reactions to minor stressors, and prolonged emotional recovery periods. Functional consequences included strained interpersonal relationships, occupational difficulties, and heightened vulnerability to comorbid anxiety and depressive symptoms. Stimulant and non-stimulant ADHD pharmacotherapies demonstrated partial benefit, while adjunctive psychotherapeutic approaches were associated with improved affect modulation over time.

Conclusion: This case series highlights the heterogeneity of ED presentations in adult ADHD and underscores the need for integrated treatment approaches addressing both core ADHD symptoms and emotional control.

Keywords: Adult ADHD, emotional dysregulation, case series, low frustration tolerance.

INTRODUCTION

Attention deficit hyperactivity disorder is a complex neurodevelopmental disorder with persistence into adulthood in approximately 60% of the cases.[1]

The triad of inattention, impulsivity and hyperactivity is well documented, but many adults also suffer from impairments in emotional regulation.[2,3]

Emotional dysregulation refers to the inability to modulate emotional responses in a socially adaptive and contextually appropriate manner. Emotional dysregulation is increasingly recognized as a significant and impairing symptom cluster in adult attention deficit and hyperactivity disorder though not formally included in diagnostic criteria. It comprises mood lability, low frustration tolerance, anger outbursts, irritability and motivational deficits.[4]

Despite growing research, emotional dysregulation remains under-recognised in ADHD and is often misattributed to mood and personality disorders.[5]

Emerging literature links emotional dysregulation with executive dysfunction in ADHD, especially involving the prefrontal cortex and limbic system.[6]

Although it has long been recognized that many individuals with attention deficit hyperactivity disorder (ADHD) also have difficulties with emotion regulation, no consensus has been reached on how to conceptualize this clinically challenging domain. Emotional dysregulation can lead to significant

distress, interpersonal difficulties, and impaired functioning.[7]

The following case series illustrates how Emotional dysregulation manifests in adult ADHD and how proper diagnosis and treatment lead to significant functional improvements.

Case report 1

Mr B, a 25-year-old male, unmarried, graduate, belonging to Lucknow currently staying in Mumbai for work, working as an actor, presented in OPD setting with complaints of difficulty in attention and concentration,

anger outbursts and constant worry about his stage performances.

Duration was unclear as the patient said he had always had problems in staying focussed since he had known.

The client reported about difficulty in attention and concentration while working, mostly during his stage performances. He used to forget a few of his dialogues at times, due to which he would be worried about his performances.

He would get sweaty, restless, unable to maintain a calm composure and would experience difficulty in dialogue delivery. He further added about his nervousness while performing on stage which would make him worried about his career.

Since childhood, the client reported having difficulty in focusing in academics.

He has faced difficulty in retaining the academic content for a long time as a child.

He has been below average in academics since childhood. He would hardly pass during his school.

During school, under peer influence he started consuming drugs and alcohol.

This affected his academics in a drastic way, and he had to skip school. He was under psychiatric treatment for his drug usage habits. He passed intermediate through open schooling.

At the time of presentation, he was consuming 750 ml alcohol a week and 2-3 cigarettes a day. He had also been inconsistently consuming various other substances of abuse out of curiosity and peer pressure.

The client shared cordial bond with his parents but he didn't have a great bond with his brother.

Their relationship has been disturbed since childhood, they would often indulge in fights and arguments. He said that his brother would call him'short fused'. They have no communication with each other for 3 years.

The client is in a long-distance relationship, and he is extremely concerned about his partner. He often expects her to function in a desired way, and if she fails in doing so, he has difficulty in controlling his anger. There are frequent quarrels and

arguments due to it. He reported that his girlfriend frequently complains about his snappiness and impatient behaviour.

On MENTAL STATUS EXAMINATION

Index client was well-kempt and tidy. Touch with surrounding present. Eye contact was maintained. His attitude towards the examiner was cooperative and rapport was established with ease. The rate of speech, pitch, tone, volume and reaction time were normal. Attention was aroused and sustained for the required duration. He was oriented to time, person and place. Immediate, recent, and remote memory was intact. Mood was reported to be anxious, and the affect was found to be anxious too. No perceptual disturbances were found in the current state. Judgment was intact. Insight was grade V.

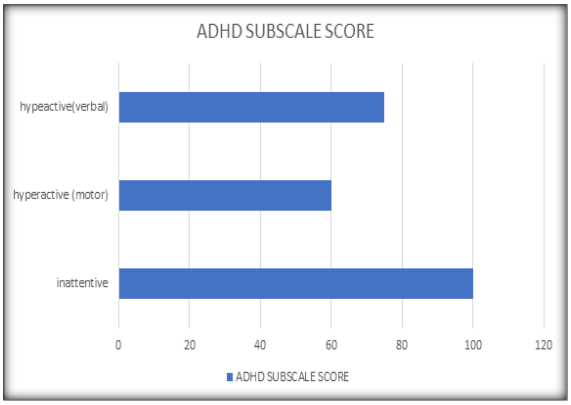
Psychological Assessments

Adult ADHD Self-Report Scale (ASRS-v1.1) Symptom Checklist,[8] was used on which the total score was 15 and subscale scores were as follows:

Percentile-99.8%.

Adhd subscale scores

Adhd subscale score	Raw score	Items endorsed (%)
Inattentive	9	100
Hyperactive (motor)	3	60
Hyperactive(verbal)	3	75



Adult ADHD Self-Report Scale (ASRS-v1.1) Symptom Checklist

Impression

Test findings on Adult ADHD Self-Report Scale suggested that the client is likely to have ADHD. DIVA 5.0,[9] confirmed the diagnosis of adult ADHD, combined type BDEFS,[10]-high impairment on self restraint and self- regulation of emotions.

Differential Diagnosis

social anxiety disorder performance type was kept in view of the difficulties related to performances as an actor. However, the other problems like interpersonal difficulties, cannot be explained solely on the basis of that. Moreover, executive dysfunction favoured a diagnosis of ADHD. Substance abuse is present in harmful use pattern.

Management

He was started on atomoxetine 30 mg per day and 80 mg of propranolol.

CBT for anger management 2 sessions weekly was concurrently used.

Outcome and follow-up

In 2 months time, the patient reported greater anger control and increased focus in stage performances.

Case report 2

Mr M, a 19-year-old single, class 12th pass, hailing from a nuclear family, presented with difficulty with attention and concentration, disturbed sleep and appetite, forgetfulness, restlessness, and mood fluctuations, markedly increased since 7 months.

The client's father further added that since childhood, the patient has been very active. He would often struggle to follow rules and regulations or play cooperatively with peers.

He would become irritated or angry when expected to obey rules at school or home, and his teachers frequently complained about his talkative nature. Even now, patient's family members often point out his habit of interrupting others while talking.

Additionally, he has had difficulty maintaining consistency in hobbies and activities, though he has been academically above average. The client reported that his forgetfulness, present since childhood, has affected his academic performance. He often experiences persistent thoughts and daydreaming.

He reports experiencing mood swings without apparent reasons which has affected his relations in his family and school. He said his friends have complained that they find it difficult to be with him due to his unpredictable mood shifts.

He further mentioned that he often zones out during conversations and gets easily distracted.

He also struggles with confusion and decision-making, particularly regarding his career. He opted for biology stream and wanted to pursue his career in medicine. He appeared for NEET examinations twice but couldn't clear, now has since shifted to a non-medical field.

- History of Diabetes in grandmother
- History of cancer in grandfather he passed away in 2019
- Biological functioning: Disturbed sleep
- Role Functioning: The client takes care of his hygiene and activities of daily living.

MENTAL STATUS EXAMINATION

Index client was well-kempt and tidy. Touch with surrounding present.

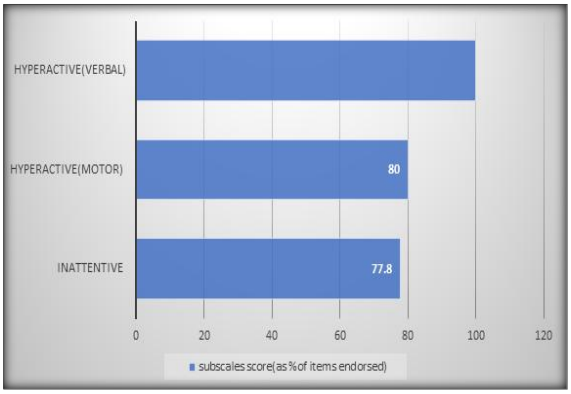
Eye contact was maintained. His attitude towards the examiner was cooperative and rapport was established with ease. The rate of speech was increased. The pitch, tone, and volume were mildly high. Reaction time was decreased. Attention was aroused and sustained for the required duration. He was oriented to time, person and place. Immediate, recent, and remote memory was intact. Mood was reported to be irritable, and the affect was found to be depressed. No perceptual disturbances were found in the current state. Judgment was intact. Insight was grade V.

PSYCHOLOGICAL ASSESSMENTS

Adult ADHD Self-Report Scale (ASRS-v1.1) Symptom Checklist was used on which the total score was 15 and subscale scores were as follows:

Percentile-99.8%

Adhd subscale	Raw score	Items endorsed (%)
Inattentive	7	77.8
Hyperactive/Impulsive (Motor	4	80
Hyperactive/Impulsive (Verbal	4	100



Graph 2: ADHD subscale scores in index patient

Impression

Test findings on Adult ADHD Self-Report Scale suggested that the client is likely to have ADHD. DIVA 5.0 confirmed the diagnosis of ADHD, combined type

BDEFS-high impairment on self motivation, time management and self- regulation of emotions.

Differential Diagnosis

Cyclothymia in view of the fluctuating moods not fulfilling criteria for mania or depression However the other problems like interpersonal difficulties, cannot be explained solely on the basis of that. Moreover, executive dysfunction favoured a diagnosis of ADHD

Management

He was started on methylphenidate 20mg BD. The doses were hiked upto 60 mg of methylphenidate CBT for executive dysfunction 2 sessions weekly was concurrently administered.

Outcome and follow-up

In 2 months time, the patient reported greater stability in mood, better initiative in academics and increased focus.

Case report 3

Ms. R, is a 21-year-old female, born out non consanguineous parents, currently studying medicine

in Lucknow, originally belonging to Haryana is pursuing an MBBS degree and currently in the second year of her course, staying in hostel. Her parents are working as government teachers, her brother is studying in class 12th. The client further reported that her relationship with her parents and siblings is cordial. The home environment has been cordial during her growing up age.

Since childhood, the client reports having difficulty in focusing in academics. She has faced difficulty in retaining the content for a long time as a child. She would not be able to study for exams or submit assignments on time due to inattention, she tends to forget the learned information and content. Meeting deadlines has been a challenge for her since childhood.

In school she did not have many friends, she was a quiet child she would always remain alone. She has been a sensitive person since childhood and is not able to face criticism positively. She is not able to forget critical comments and would constantly keep thinking about it. It has been affecting her emotionally for a long time. Incidents of being teased at coaching by her classmates was also reported.

Currently, the client reported of getting distracted frequently, has difficulty in retaining information for long and forgets things, loses track of work and gets lost in thoughts, would often delay or avoid tasks especially if it needs mental efforts.

The client has difficulty in forming and maintaining relationships with people, prefers to stay with her close friends. She feels scared when she has to talk to new people, and she is not able to communicate her thoughts in the proper manner when talking to new people.

Mental Status Examination

Index client was well-kempt and tidy. Touch with surrounding present. Eye contact was maintained. Her attitude towards examiner was cooperative and rapport was established. The rate of speech was normal. Pitch, tone, and volume were very slow. Reaction time was normal. Attention was aroused and sustained for a longer duration. She was orientated to time, person and place. Immediate, recent, and remote memory was intact. Mood was reported to be sad, and affect was found to be depressed. No perceptual disturbances were found in the current state. Judgment was intact. Insight was grade IV.

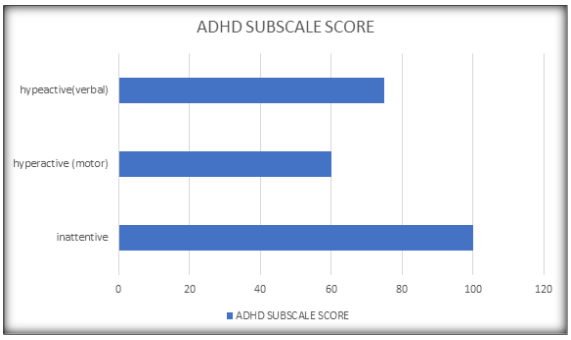
Psychological Assessments

Adult ADHD Self-Report Scale (ASRS-v1.1) Symptom Checklist was used on which the total score was 15 and subscale scores were as follows:

Percentile-99.8%

Adhd subscale scores

Adhd subscale score	Raw score	Items endorsed (%)
Inattentive	9	100
Hyperactive (motor)	3	60
Hyperactive(verbal)	3	75



Adult ADHD Self-Report Scale (ASRS-v1.1) Symptom Checklist

Impression

Test findings on Adult ADHD Self-Report Scale suggested that the client is likely to have ADHD. DIVA 5.0 confirmed the diagnosis of ADHD, combined type

BDEFS-high impairment on self restraint and self-regulation of emotions.

Differential Diagnosis

Depression

social anxiety disorder performance type was kept in view of the difficulties related to performances as an actor. However the other problems like interpersonal difficulties, cannot be explained solely on the basis of that. Moreover, executive dysfunction favoured a diagnosis of ADHD

Management

He was started on methylphenidate 20mg BD. The doses were hiked upto 60 mg of methylphenidate.

CBT for executive dysfunction 2 sessions weekly was concurrently used.

Outcome and follow-up

In 2 months time, the patient reported greater alertness and increased focus in medical studies.

DISCUSSION

It is evident from all the three cases that symptoms of ADHD began in childhood and continued into adulthood. This goes with the DSM 5 diagnostic criteria of Adult ADHD wherein the onset of symptoms should be traceable to childhood.[11-12]

In the first and third cases, inattention was predominant whereas in second case, hyperactivity in the form of verbosity and restlessness was marked. This is in tune with findings of researchers that the pattern of symptoms may change in adulthood especially hyperactivity manifesting as restlessness and fidgetiness.[1,13]

Interestingly, Emotional dysregulation was present in all the three cases and was a major reason for seeking psychiatric consultation.

In case 1, anger outbursts and low frustration tolerance were predominant resulting in disturbed interpersonal relationships.
In case 2, low frustration tolerance, motivational deficits and mood lability were clearly seen, which were responsible for disturbances in interpersonal relationships. Occupational difficulties were due to motivational deficits.
In case 3, low frustration tolerance resulted in friendship difficulties, avoidance and social withdrawal. Motivational deficits resulted in struggles with medical studies and failure to meet deadlines.
In their study, Shaw et al reported that emotion dysregulation is prevalent in ADHD throughout the lifespan and is a major contributor to impairment.[2]
Notably, low frustration tolerance (LFT)—defined as an exaggerated emotional response to minor provocations, delays, or obstacles, was seen in all the three cases.[14]
Neurobiologically, LFT is thought to arise from deficient top-down regulation of limbic responses due to prefrontal cortex dysfunction and impaired dopamine signaling. Clinically, it often manifests as irritability, impatience, and emotional volatility, and contributes to poor interpersonal relationships, academic failure, and occupational dysfunction.[2]
Motivational deficits are a frequently overlooked but debilitating aspect of adult attention-deficit/hyperactivity disorder (ADHD). These deficits, which include procrastination, low initiation, task avoidance, and inconsistent reward sensitivity, may impair occupational, academic, and social functioning.[15]
These deficits lead to reduced initiation of goal-directed behavior, poor sustained effort, increased task avoidance, and diminished sensitivity to delayed rewards.[13] Neurobiologically, dysfunction in frontostriatal and dopaminergic systems—particularly in the mesolimbic pathway—may contribute to impaired motivation in ADHD.[6] Clinically, motivational impairments can manifest as chronic procrastination, difficulty starting or completing tasks, and emotional disengagement from goals.
Mood lability, also known as affective lability, is characterized by sudden, intense, and often unpredictable changes in mood states, such as shifts from euphoria to irritability or sadness without appropriate contextual triggers.[17] It is a core feature in various psychiatric conditions including bipolar disorder, borderline personality disorder (BPD), attention-deficit/hyperactivity disorder (ADHD), and certain neurocognitive disorders.[18] Emotional lability can lead to significant distress, interpersonal difficulties, and impaired functioning. Yet, it remains under-recognized due to its non-specific nature and overlap with other mood symptoms.[2]
Although impulsivity and inattention are well-established diagnostic criteria for ADHD, anger outbursts are often overlooked despite being a frequent and impairing feature in adults with ADHD.[14] Anger outbursts in ADHD are typically reactive, short-lived, and disproportionate to the trigger, often reflecting poor emotional self-regulation and impulsivity.[16] Neurobiologically, dysregulated frontolimbic circuitry—especially involving the orbitofrontal cortex and amygdala—has been implicated in reactive aggression and affective lability in ADHD.[2] Clinically, these outbursts may lead to relationship issues, workplace conflicts, and social withdrawal.
With respect to management, in all the three cases presented here, some decrease in emotional dysregulation was seen with ADHD medications. Non pharmacologically, CBT targeting executive dysfunction such as working memory and planning abilities helps to improve the executive dysfunction in ADHD in adults but whether these strategies can improve emotional dysregulation cannot be said with conviction.[19,20]

CONCLUSION

It is emphasized that emotional dysregulation is a core component of adult ADHD and one of the main reasons for impairments in interpersonal and occupational domains. New strategies and guidelines should be devised to deal with emotional dysregulation in adults with ADHD.

Future directions

Functional imaging studies should be encouraged to study a broad range of tasks of emotion regulation, defining the neural basis of the ability to reinterpret the meaning of emotional stimuli.

REFERENCES

1. Caye A, Rocha TBM, Anselmi L, Murray J, Menezes AMB, Barros FC, et al. Attention-deficit/hyperactivity disorder trajectories from childhood to adulthood: a literature review on long-term outcomes. J Child Psychol Psychiatry. 2016;57(6):645–655. doi:10.1111/jcpp.12486
2. Shaw, P., Stringaris, A., Nigg, J., & Leibenluft, E. (2014). Emotion dysregulation in attention deficit hyperactivity disorder. American Journal of Psychiatry, 171(3), 276–293.
3. Wender, P. H. (2001). Attention-deficit hyperactivity disorder in adults. Oxford University Press.
4. Beheshti A, Chavanon ML, Christiansen H. Emotion dysregulation in adults with attention deficit hyperactivity disorder: a meta-analysis. BMC Psychiatry 2020; 20:120.4.
5. Barkley RA, Brown TE. Unrecognized attention-deficit/hyperactivity disorder in adults presenting with other psychiatric disorders. CNS Spectr 2008; 13:977.
6. Castellanos, F. X., & Tannock, R. (2002). Neuroscience of attention-deficit/hyperactivity disorder: The search for endophenotypes. Nature Reviews Neuroscience, 3(8), 617–628.
7. Biederman J, Faraone SV, Spencer TJ, et al. Functional impairments in adults with self-reports of diagnosed ADHD: A controlled study of 1001 adults in the community. J Clin Psychiatry 2006 67:524.
8. Kessler RC, Adler L, Ames M, et al. The World Health Organization Adult ADHD Self-Report Scale (ASRS): a short screening scale for use in the general population. Psychol Med 2005; 35:245.
9. Kooji JJ, Francken MH. Diagnostic interview for adhd in adults(DIVA) 5.0. DIVA Foundation;2010. Available from: https://www.divacenter.eu

10. Barkley, R. A. (2011). The Barkley Deficits in Executive Functioning Scale (BDEFS). Guilford Press.
11. Moffitt TE, Houts R, Asherson P, et al. Is Adult ADHD a Childhood-Onset Neurodevelopmental Disorder? Evidence From a Four-Decade Longitudinal Cohort Study. Am J Psychiatry 2015; 172:967.
12. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), American Psychiatric Association, 2013.
13. Barkley RA, Fischer M, Smallish L, Fletcher K. Young adult outcome of hyperactive children: adaptive functioning in major life activities. J Am Acad Child Adolesc Psychiatry 2006; 45:192.
14. Surman, C. B., Biederman, J., Spencer, T., Miller, C. A., & Faraone, S. V. (2011). Understanding deficient emotional self-regulation in adults with ADHD: A controlled study. Attention Deficit and Hyperactivity Disorders, 3(3), 123–131.
15. Volkow, N. D., Wang, G. J., Fowler, J. S., & Telang, F. (2011). ADHD and the brain's reward system. Journal of the American Academy of Child & Adolescent Psychiatry, 50(9), 881–883.
16. Wiggins, J. L., et al. (2020). Neural correlates of irritability in disruptive mood dysregulation disorder. American Journal of Psychiatry, 177(8), 666–674.
17. Henry, C., et al. (2008). Affective lability and affect intensity as core dimensions of bipolar disorders during euthymic period. Psychiatry Research, 159(1-2), 1–6.
18. Barkley, R. A., & Murphy, K. R. (2010). Deficient emotional self-regulation in adults with ADHD: The relative contributions of emotional impulsiveness and ADHD symptoms to adaptive impairments. Journal of ADHD and Related Disorders, 1(2), 5–28.
19. Knouse LE, Safren SA. Current status of cognitive behavioral therapy for adult attention-deficit hyperactivity disorder. Psychiatr Clin North Am. 2010;33(3):497–509.
20. National Institute for Health and Care Excellence. Attention deficit hyperactivity disorder: diagnosis and management. NICE guideline [NG87]. 2018. Available from: https://www.nice.org.uk/guidance/ng87.