



**ATTENTION DEFICIT HYPERACTIVITY DISORDER IN ADULTS: A SILENT BUT
POWERFUL DISABLER A CASE REPORT**

Amit Chail¹ MBBS, Harpreet Singh^{@1} MD and P. S. Bhat² MD

¹Department of Psychiatry, Command Hospital, Southern Command, Pune.

²Department of Psychiatry, Armed Forces Medical College, Pune.

***Corresponding Author: Dr. Harpreet Singh**

Department of Psychiatry, Command Hospital, Southern Command, Pune.

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ABSTRACT

Attention-Deficit/Hyperactivity Disorder (ADHD) is conceptualised as a neuro-developmental disorder with behavioural and cognitive manifestations in domains of attention, hyperactivity and impulsiveness. ADHD in adults is underdiagnosed and under-treated and can lead to significant socio-occupational impairments. ADHD symptoms can have significant overlap with mood disorders, anxiety disorders and substance use which complicates the diagnostic and therapeutic process. We report a case of ADHD in an adult patient with late presentation and significant impairment.

KEYWORDS: ADHD in adults, Atomoxetine, inattention, impulsive, hyperactive.

INTRODUCTION

Attention-Deficit/Hyperactivity Disorder (ADHD) has been described as a pattern of inattentive and/or hyperactive-impulsive behaviour which is inconsistent with developmental level and interferes with functioning in social, educational, or work setting.^[1] The disorder is currently viewed as a lifespan neurodevelopmental disorder with adult manifestations. Longitudinal follow-up studies of adults previously diagnosed with childhood hyperactivity reported ADHD persistence in 40 to 60 percent of cases.^[2] Adult ADHD is a common condition with reported prevalence of around 3-5% in different studies.^[2-4]

DSM-5 has made certain important changes in the conceptualisation and diagnosis of the disorder.^[1] Firstly, ADHD is now considered a lifespan neurodevelopmental disorder. Secondly, DSM-5 requires that the symptoms must be present before the age of 12 years. Thirdly, history of childhood ADHD is must for making a diagnosis of Adult ADHD. Fourth, symptom criteria for each domain in children are 6 (six) out of 9, while its 5/9 for adults. Lastly, the symptom definition for different age groups is different e.g. a child with inattention may often be distracted by extraneous stimuli while adults may be distracted by unrelated thoughts. Similarly a hyperactive child may be fidgety, jumpy and running around when being seated is expected, but in adults there is more subjective restlessness than motor over-activity. Impairments are seen in multiple domains like social, family, academic and occupational.

In a recent network meta-analysis, it was reported that a combination of pharmacological and behavioural interventions yields the best results than either modality alone.^[6]

CASE REPORT

A 33 year old male, a known case of hypertension on medication with irregular compliance educated upto M Tech (Computer Science), working as a quality controller in a Govt Institute in Pune, self-reported with his spouse to our Psychiatric OPD for evaluation. His chief complaints were inability to concentrate and forgetfulness about routine tasks and chores for more than 10 years. He also complained of intermittent sadness of mood and difficulty in sleep onset. He was reported repeated, unwanted and distracting thoughts like multiple, varying songs playing and frequently shifting from one task to another despite him wanting to complete it up to his satisfaction.

In his office, he would find it difficult to focus on a meeting for more than 10-15 minutes as again the songs would start playing in his mind. He would suddenly remember the bills and chores which he had to complete and would get repeatedly distracted by these thoughts. He would become restless and would want to get up and do something else. In his home, he was shifting from task to task and from reading 1-2 pages of a book to a movie or a project. He would prefer to stay online and shift from one social media platform to other or to online shopping websites.

He would often take up multiple tasks in office and would then find it difficult to organise them. He would smoke 4-5 cigarettes in a day to help him “focus better” on a task. He would try to post-pone the domestic and official tasks until it was highly essential or urgent to do them. This led to his poor performance at his work-place, frequent change of jobs and not working up to his own expectations and educational qualifications.

Around 4-5 months before he reported to our OPD, he started feeling depressed, had disturbed sleep, lethargy and reduced libido. His cigarette and coffee intake also increased to 8-10 cigarettes and 6-8 cups of coffee per day. He started having frequent altercations with his wife and would often snap at her over minor issues. As his mood symptoms worsened and interpersonal relations with his wife deteriorated she persuaded him to consult a psychiatrist.

There was no significant family history of psychiatric illness. Initial presentation was suggestive of Obsessive Compulsive Disorder with obsessions and resultant slowing and secondary mood symptoms. Baseline haematological, biochemical work-up including Thyroid profile and ECG, was normal. He was started on Cap Fluoxetine 20 mg OD, but returned with anxiety symptoms over the next 05 days.

Subsequent history from his mother revealed the individual was always fidgety, overactive and got bored easily. He had these symptoms even in primary school where he would keep moving around the class, not focus on the lectures, teasing other classmates and sometimes forgetting items like pencil in the class. By his 5th class, there were regular complaints from his teachers regarding his overactivity, fidgetiness. He also made careless mistakes in his homework and classroom notes and got easily distracted and would shift from one game to another.

Despite having above average intelligence, he could not get selected for engineering in a reputed institute as he was unable to focus on studies for more than 25-30 minutes at a stretch even during his exams. He took admission in a private engineering college. Even in his college, he failed in 2-3 subjects every year despite knowing the subjects. After his B.E, he got admission into M. Tech during which he again failed twice. After his M. Tech, he changed 3 jobs in 05 years and was frequently admonished at job for his erratic work performance and poor attention.

With this additional history, a diagnosis of Adult ADHD was considered. He was administered Adult ADHD Self Report Scale (ASRSv1.1) with which he screened positive for adult ADHD. Current evaluation was positive for 04 symptoms in hyper-activity/impulsivity and 06 in inattention domains as per DSM-5. His BDI score was 26 (suggestive of moderate level of depression).

He was diagnosed as a case of adult ADHD, predominantly inattentive presentation, current severity: moderate, with co-morbid Major Depressive Disorder.

He agreed for a therapeutic trial of medication. He was started on Tab Atomoxetine up to 90 mg per day over next 03 weeks. He was also counselled regarding need for abstinence from smoking and other lifestyle changes in form of regular aerobic exercises and dietary modification for weight reduction. He was also educated about maintaining diary, putting up mobile-reminders and stick-on pads for important tasks. Principles of re-enforcement were used whenever he finished any task or at least worked on it for more than 45 minutes. He was also taken up for 10 sessions of twice weekly CBT for his depressive symptoms. With treatment started feeling more confident about himself as he was able to attend meetings for longer duration and his work performance at office improved. His mood symptoms also improved. He was subsequently maintained at Atomoxetine 72 mg/day.

At six months follow-up, individual reports significant improvement in his symptoms, work performance, social and family role functioning. He has been able to reduce his caffeine intake to 02 cups of tea/coffee a day and is presently abstinent from nicotine for the last 02 months.

DISCUSSION

ADHD is often associated with many physical and psychiatric comorbidities.^[2,7] Psychiatric conditions associated during the developmental period include history of oppositional defiance disorder, disruptive behaviour, tics, substance use disorders like nicotine.^[7,8] Although our patient had onset of symptoms during childhood, he managed to compensate and tolerate the illness almost till mid-30s through support of his family members.

During adulthood comorbidities includes affective disorders like depression, anxiety disorders, risky behaviour and antisocial activities, substance use disorders like alcohol, nicotine, cannabis etc and poor health maintenance.^{[7][8][9]} The initial manifestation and the reason for psychiatric referral may be the comorbid disorder. These comorbid conditions frequently mask the symptoms of ADHD and it is often unrecognized and undertreated as was the case initially in our patient. The initial presentation in this too included an assortment of affective, obsessive symptoms with indicators of excessive nicotine and caffeine use. A study conducted at NIMHANS, Bangalore found that among 240 patients with SUD, 135 (56.25%) screened positive for “likely ADHD” and 52 (21.7%) for “highly likely ADHD.”^[10]

It was only with longitudinal follow-up and careful and detailed history that the underlying ADHD symptoms came to forefront. Also there was a delay in treatment seeking due to ignorance of the individual and the family members.

Atomoxetine has been reported to be an effective agent in treatment of adult ADHD^[11] and is approved by US FDA for the same.^[12] Also recent reviews and meta-analysis indicate that its acceptability and tolerability is comparable to OROS Methylphenidate.^{[11,13][6,14]} Among the non-pharmacological interventions CBT has been proven to be a useful adjunct to pharmacotherapy.^[15,16]

The index case outlines the importance of identifying underlying ADHD. The outcome in all domains including affective, attention and concentration, subjective restlessness and overall socio-occupational functioning was satisfactory for the patient and insightful for the treating team.

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BIBLIOGRAPHY

- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Fifth edition. Arlington, VA; 2013.
- Sadock, Benjamin James, Sadock VA. Kaplan & Sadock's Comprehensive Textbook of Psychiatry. 10Th Edition. LWW; 2017.
- Amiri S, Ghoreishizadeh MA, Sadeghi-Bazargani H, Jonggoo M, Golmirzaei J, Abdi S, et al. Prevalence of Adult Attention Deficit Hyperactivity Disorder (Adult ADHD): Tabriz. Iran J Psychiatry [Internet]., 2014 Apr [cited 2018 Oct 3]; 9(2): 83–8. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25632285>
- Visser SN, Danielson ML, Bitsko RH, Holbrook JR, Kogan MD, Ghandour RM, et al. Trends in the parent-report of health care provider-diagnosed and medicated attention-deficit/hyperactivity disorder: United States, 2003–2011. J Am Acad Child Adolesc Psychiatry [Internet]. 2014 Jan [cited 2018 Oct 3]; 53(1): 34–46.e2. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24342384>
- World Health Organization. The ICD-10 Classification of Mental and Behavioural Disorders Clinical descriptions and diagnostic guidelines [Internet]. 1992. Available from: <http://www.who.int/classifications/icd/en/bluebook.pdf>
- Catalá-López F, Hutton B, Núñez-Beltrán A, Page MJ, Ridao M, Saint-Gerons DM, et al. The pharmacological and non-pharmacological treatment of attention deficit hyperactivity disorder in children and adolescents: A systematic review with network meta-analyses of randomised trials. Vol. 12, PLoS ONE., 2017; 1-31 p.
- Stahl SM. Stahl's Essential Psychopharmacology: Neuroscientific Basis and Practical Application. 4th ed. Vol. 53. Cambridge CB2: Cambridge Univ Press; 2013; 1689-1699 p.
- Rutter M. Rutter's Child and Adolescent Psychiatry. Sixth. Anita Thapar DSP, editor. JohnWiley & Sons, Ltd; 2015.
- Gelder Michael, Andreason Nancy GJ. New Oxford textbook of Psychiatry. Second edi. Oxford University Press; 2009.
- Ganesh S, Kandasamy A, Sahayaraj US, Benegal V. Adult Attention Deficit Hyperactivity Disorder in Patients with Substance Use Disorders: A Study from Southern India. Indian J Psychol Med [Internet]. 2017 [cited 2018 Sep 26]; 39(1): 59–62. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/28250560>
- Cortese S, Adamo N, Del Giovane C, Mohr-Jensen C, Hayes AJ, Carucci S, et al. Comparative efficacy and tolerability of medications for attention-deficit hyperactivity disorder in children, adolescents, and adults: a systematic review and network meta-analysis. The Lancet Psychiatry [Internet]. 2018; 1–12. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S2215036618302694>
- Commissioner O of the. Press Announcements - FDA approves first generic Strattera for the treatment of ADHD. [cited 2018 Sep 26]; Available from: <https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm561096.htm>
- Wilens, TE, Morrison, NR, Prince J. An update on the pharmacotherapy of ADHD in adults. Expert Rev Neurother, 2011; 11(10): 1443.
- Bushe C, Day K, Reed V, Karlsdotter K, Berggren L, Pitcher A, et al. A network meta-analysis of atomoxetine and osmotic release oral system methylphenidate in the treatment of attention-deficit/hyperactivity disorder in adult patients. J Psychopharmacol [Internet]. 2016 May 22 [cited 2018 Sep 26]; 30(5): 444–58. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27005307>
- Verma R, Balhara YPS, Mathur S. Management of attention-deficit hyperactivity disorder. J Pediatr Neurosci [Internet]. 2011 Jan [cited 2018 Sep 26]; 6(1): 13–8. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/21977081>
- National Institute for Health and Care, Excellence. Attention deficit h hyperactivity disorder: diagnosis and management. 2018; (March): 1–12. Available from: [nice.org.uk/guidance/ng87](http://www.nice.org.uk/guidance/ng87)