ECRONICON OPEN ACCESS

PSYCHOLOGY AND PSYCHIATRY
Case Report

Inattentive Female Adult ADHD, Pure Obsessional OCD and Role of Atomoxetine: A Case Report

Madhav Gajananrao Raje*

Consultant Psychiatrist and Psychotherapist, Mahakali Clinic, Nagpur, Maharashtra, India

***Corresponding Author:** Madhav Gajananrao Raje, Consultant Psychiatrist and Psychotherapist, Mahakali Clinic, Nagpur, Maharashtra, India.

Received: June 06, 2020; **Published:** July 29, 2020

DOI: 10.31080/ecpp.2020.09.00746

Abstract

This case represents three uncommon features, (1) inattentive female adult ADHD, (2) pure Obsessional type of OCD that was co morbid with adult ADHD, (3) remission of pure obsessions by Atomoxetine. Initially adult ADHD was missed and pure Obsessional OCD was alone treated. On recurrence; adult ADHD was treated alone. Treatment of adult ADHD by Atomoxetine remitted pure Obsessional symptoms. Attributing factors behind these three uncommon features are discussed.

Keywords: *Pure Obsessional OCD; Atomoxetine; Female Adult ADHD; Nor-Epinephrine Reuptake Inhibitor; Neuro-Developmental Disorder; Daydreaming; Sluggish Cognitive Tempo*

Introduction

It is considered that pediatric ADHD and adult ADHD is male dominant neurodevelopmental disorder [1]. Female adults with ADHD are less diagnosed [1]. Reasons behind could be because of (a) biological/hormonal affect [1], (b) cultural effect, (c) less threatening life style (d) lack of awareness and acceptance [2], (e) varying guidelines for its management [2], (f) Inattentive type of ADHD among female [3], (g) drastic change of features of pediatric ADHD to adult ADHD [4].

This case treatment is divided into two phases; in first phase co morbid condition was treated with recovery but recurrence could not be prevented. Underlying adult ADHD was diagnosed later and when treated alone prevented recurrence of co morbid conditions too. Thus (1) treatment of underlying adult ADHD to prevent recurrence of co morbid condition and (2) remission of Obsessional symptoms by Atomoxetine are uncommon features of this case.

Case Report

Female of 44, married, mother of two, slightly obese (72 Kg with 152 cm height), teacher by occupation, referred by an old patient; visited on 23rd February 2018 along with her husband. Main complaints were uneasiness, rumination, and hoarding of thoughts. She was under psychiatric treatment since almost one year with no relief.

Detail history part 1: Before one year she used to take treatment from a physician. Her complaints then were attributed to her hypertension. Her uneasiness was of moderate degree; associated with deep breathing and quivering. She used to go out of house whenever feels uneasy. Uneasiness was not associated with palpitation, sweating, dry mouth, etc. Uneasiness was associated with ruminating negative

thoughts. She used to feel unknown fear extending to delusional idea that other co teachers are trying to find her faults. She used to hoard such negative thoughts as long as for 3 to 4 days. Daily haunting of thought was associated with lack of interest and motivation in teaching despite her regularity in job. She also complained of unsound sleep, dull mornings, irritability, occasional nervousness, forgetfulness, sad feelings, occasional guilt, and slight weight gain. Nervousness was not daily and consistent experience. She denied of suicidal ideation/thoughts, hopelessness, and loss of appetite. Further exploration revealed that she is religious, obsessed with cleanliness, experiences urge of sharing, but denied of repeated hand washing/checking activities. She further disclosed that she has claustrophobia. She over thinks and holds excessive concern about her health, but not amounting hypochondriasis. Stressors in her life other than delivery were death of both parents which were not associated with psychic complaints. She denied of frank delusion/hallucination, domestic violence, or spousal or family issues. Past history disclosed that she took treatment from one psychiatrist. She was kept on Sertraline, flupenthixol, and clonazepam for four months (May 2017 to August 2017). Personal and family history was insignificant. She was hypertensive (under treatment) and non-diabetic. Laboratory investigations including thyroid profile was within normal limits.

Diagnosis and results of treatment part 1: Her provisional diagnosis was "pure O" type of OCD". Her mental obsession in absence of physical compulsion was salient feature to diagnose "pure Obsessional lesser known subtype of OCD" [5]. Hence she was kept on Fluvoxamine alone in the doses of 50 to 150 mg per day. Initially Chlordiazepoxide 12.5 mg at night for first 20 days along with Propranolol sustained release 20 mg once a day was given which was shifted to less addictive molecule clobazam 2.5 mg at night for one month to counter her uneasiness. She was asymptomatic after two months; then clobazam was omitted. Fluvoxamine alone in the dose of 150 mg per day was continued for almost 10 months and then tapered off gradually because of near complete asymptomatic phase and patient's voluntary demand to discontinue treatment.

Follow up with recurrence part 2: After almost 8 months patient revisited for recurrence of uneasiness, fear of going to school, rumination, negative thoughts, nervousness, loss of 4 kg weight since one month.

Detailed history part 2 was explored with the inquiry on reasons of recurrence. As per conventional practice it was considered a plain recurrence; however according to guidelines exploration of detail history and re-evaluation of earlier diagnosis was imperative. While checking differential diagnosis possibility of adult ADHD was also evaluated for the first time in this case. Reply to the question "Are you a patient or impatient person?" was "impatient"; that raised alarm aloud. Answer to the immediate following question "do you feel that you are always in a hurry?" was affirmative. These two replies compelled to screen her for adult ADHD. However other questions before screening test were also affirmative e.g. patient accepted that she experiences lack of concentration, easy distractibility, and habit of undertaking simultaneous multiple tasks. She revealed that she has habit of day-dreaming especially when lie down during daytime. She suffers indecisiveness to the extent that she feels dumb and as if her brain is not working properly indicative of sluggish cognitive tempo (SCT). She also revealed that she has habit of too much planning and over thinking. She accepted that her sense of time is poor i.e. she gets lost to notice amount of time lost in doing some interesting activity. She has so many tasks to do on daily basis but cannot prioritize tasks and thus feels bewildered. She occasionally commits silly mistakes; however, errors increase when she is upset. Her sleep was okay from 12 to 7 am though onset delays by 1 to 2 hours. Her forgetfulness is of mild degree and does not bother her.

Investigations: Y-BOCS score was 25 indicating presence of moderate OCD. Screening test of adult ADHD (ASRS v1.1) was strongly positive with scores of part A 4/6 and part B 3/18. Question numbers 1, 2, 4, 6, of part A were positive while question numbers 8, 9, of part B were positive.

Treatment and results part 2: (i) Atomoxetine 10 mg in the morning dose for 15 days. It was increased and maintained to 35 mg per day after 10 months of continuous treatment. (ii) Clobazam 2.5 mg three times a day started initially to reach optimum dose of 10 mg at night. She was maintained with this dose. Her recovery started after 7 days of Atomoxetine when symptoms of uneasiness, fear, rumination, unsound sleep and sluggish cognitive tempo (SCT) were 20% less.

Follow up: Follow up of 10 months revealed that she was satisfied and asymptomatic.

Discussion

This is a case of inattentive adult ADHD with co morbid Obsessional OCD. Co morbid Obsessional OCD [5] is one of the uncommon features of this case.

Female adult ADHD are difficult to diagnose because of inattentive type. Takashi Ohnishi., *et al*. (2019) observed similar findings. Inattentive type of female adult ADHD is the commonest type among three, i.e. inattentive (58.43%), hyperactive and impulsive (6.96%) and mixed (34.61%) [5]. In this case only co morbid condition was treated initially (successfully) as per guidelines. Guidelines direct to treat co morbid conditions first keeping aside adult ADHD untreated. But recurrence took place. Then instead of treating recurring co morbid condition; underlying ADHD was treated alone. Adult ADHD couldn't be diagnosed early so remained untreated. Ample of literature mentions that adult ADHD remains commonly undiagnosed [2] but awareness can help diagnosis as experienced in this case. Unique feature of this case is that adult ADHD alone was treated; disregarding prevailing co morbid OCD. 10 months follow up revealed that treatment of adult ADHD alone could overcome Obsessional symptoms without SSRI. Clobazam was added to reduce anxiety which reinforces cycle of obsession and compulsion played major role in remitting Obsessional symptoms. Similar to this case's experience Clemow., *et al*. (2017) also observed that Atomoxetine is not useful while treating anxiety disorders as against depression. But role of Atomoxetine to relieve Obsessional symptoms alone is not reported before. Our literature search found that symptoms of anxiety, depression, opposition defiant disorder or conduct disorder can be reduced by Atomoxetine [6] but search could not support role of Atomoxetine to remit symptoms of co morbid pure Obsessional OCD. Timothy R Berigan (2004) observed that resistant symptoms of depression were remitted by addition of Atomoxetine. In contrast to this case's findings i.e. usefulness of Atomoxetine in pure Obsessional OCD Mengühan Araz Altay reported (2019) that Atomoxetine has caused OCD in 11 year boy [7]. Similarly, Hamza Ayaydin (2018) reported a case where Atomoxetine has caused trichotillomania in a 9 year old boy [8]. Researchers report contrasting observations about effect of Atomoxetine when used as adjunct medicine. Atomoxetine is presynaptic specific noradrenergic (NE) reuptake inhibitor. It augments rise of levels of nor-epinephrine and dopamine in prefrontal cortex. Frank P Bymaster., *et al*. (2004) reported that Atomoxetine is more potent NE uptake inhibitor with relatively low affinity for 5 HT and Dopamine uptake processes [9]. Rise of dopamine levels could cause OCD symptoms [7,8] but low dose of Atomoxetine might not affect dopamine levels. Low dose of Atomoxetine might act only to increase nor-epinephrine levels due to high affinity [9] which can remit rumination of thoughts. Thus, pure Obsessional symptoms of this case might have been remitted by low dose of Atomoxetine i.e. 35 mg per day for 70 kg i.e. 0.5 mg per kg body weight.

Atomoxetine was preferred against stimulants in this case because of co morbid OCD [6]. Stimulants are contraindicated if depression/suicidal ideations/anxiety disorders/substance use disorders are co morbid with ADHD [6].

Other symptoms like day dreaming, over thinking, SCT, inferiority complex, lack of concentration, distractibility were also reduced by Atomoxetine at low dose due to rise in nor-epinephrine levels at prefrontal cortex (PFC).

Conclusion

Underlying adult ADHD may be detected as a result of awareness among female Obsessional patients who have recurring OC symptoms. Atomoxetine can help reduce Obsessional symptoms in some adult ADHD patients.

Limitations

Inherent limitation of case report is lack of generalization.

Conflict of Interest

None.

Bibliography

1. Patricia O Quinn. "Treating adolescent girls and women with ADHD: Gender-Specific issues". *Journal of Clinical Psychology* 61.5 (2005): 579-587.

2. JJ Sandra Koori., *et al*. "Distinguishing Comorbidity and Successful Management of Adult ADHD". *Journal of Attention Disorders* 16.5 (2012): 3S-19S.

3. C Groenewald., *et al*. "Recognition and referral of girls with attention deficit hyperactivity disorder: Case vignette study". *Child: Care, Health and Development* 35.6 (2009): 767-772.

4. Monnica T Williams., *et al*. "The Myth of the Pure Obsessional Type in Obsessive-Compulsive Disorder". *Depress Anxiety* 28.6 (2011): 495-500.

5. Takashi Ohnishi., *et al*. "Psychiatric Comorbidities in Adult Attention-deficit/Hyperactivity Disorder: Prevalence and Patterns in the Routine Clinical Setting". *Innovations in Clinical Neuroscience* 16.9-10 (2019): 11-16.

6. David B Clemow., *et al*. "A review of the efficacy of Atomoxetine in the treatment of attention-deficit hyperactivity disorder in children and adult patients with common co-morbidities". *Neuropsychiatric Disease and Treatment* 13 (2017): 357-371.

7. Mengühan Araz Altay. "Atomoxetine induced obsessive compulsive disorder". *Hospital Practices and Research* 4.2 (2019).

8. Hamza Ayaydin. "Probable emergence of symptoms of trichotillomania by Atomoxetine: a case report". *Journal Psychiatry and Clinical Psychopharmacology* 29.2 (2019).

9. Bymaster F., *et al*. "Atomoxetine Increases Extracellular Levels of Norepinephrine and Dopamine in Prefrontal Cortex of Rat: A Potential Mechanism for Efficacy in Attention Deficit/Hyperactivity Disorder". *Neuropsychopharmacology* 27.5 (2002): 699-711.

Volume 9 Issue 8 August 2020