

Methylphenidate-Induced Kleptomania in a Child with Down Syndrome

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ABSTRACT

Methylphenidate is the most preferred drug in the treatment of ADHD, which is one of the psychiatric diseases that often accompany Down's syndrome. Methylphenidate, which is used safely in children and adolescents, may rarely show unexpected side effects. In our study, we present a case of kleptomania induced by methylphenidate in a child with Down syndrome, which resolved with the discontinuation of the drug.

Keywords: Methylphenidate, Down's Syndrome, Kleptomania

INTRODUCTION

Down syndrome (DS) is a commonly occurring chromosomal disorder that is associated with psychiatric comorbidity in 28.9% of cases [1]. The most common issues include general anxiety, obsessive-compulsive behaviours, neurodevelopmental disorders, depression, and sleep-related disorders [2]. Symptoms of ADHD are also prevalent in children with DS. If inattention, impulsivity, and hyperactivity are disproportionate to the mental age and result in significant impairment to academic or social development, then this diagnosis should be explored [3].

The first choice drug in the treatment of Attention Deficit Hyperactivity Disorder (ADHD) in children is methylphenidate, a central nervous system stimulant. In this treatment, a positive early response was obtained in 70-80% of the cases. Most of the children, adolescents, and adults can benefit from MPH with minimum side effects. The most common side effects are insomnia, headache, and anorexia [4].

Kleptomania is an impulse control disorder characterized by the inability to resist the impulse to steal and by over increasing tension leading up to the theft and an intense feeling of relief or gratification after [5]. There are no epidemiological data on the prevalence of kleptomania in the general population. It is estimated that about 5% of people who have committed theft may be suffering from compulsive stealing. Kleptomania may co-occur with obsessive-compulsive disorder, anxiety disorders, affective disorders, eating disorders and substance use disorders [6].

It has been reported that patients with kleptomania cases benefit from SSRIs, Lithium, Valproate, and Opioid antagonists. And the literature reports some kleptomania cases benefit from also stimulant treatment.

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In this case report, we aimed to present methylphenidate-induced kleptomania in a patient with Down's Syndrome and ADHD, unlike many cases in the literature, had no stealing impulses before stimulant treatment.

CASE

A girl, 9 years of age with DS, applied to the outpatient clinic with complaints of inattention, noncompliance for school, and often finding excuses during the lessons.

She would frequently forget her belongings in school and would easily get distracted with the slightest of noise. She would have difficulty in sustaining attention on tasks including studies, play activities, and would leave the same unfinished.

In addition, since 6 years of age, she has had more difficulties than expected in reading, writing and calculating. For example, she has read words incorrectly and slowly, has made multiple grammatical errors, has had lack of clarity in her writings, has had difficulties with calculations, and problem-solving.

Weschler Intelligence Scale for Children (WISC-R) verbal score was 68, performance score was 76, total intelligence score was 72. In her history there was no any impulse control disorders symptom. Attention deficit disorder, without hyperactivity, was diagnosed with the Kiddie-schedule for affective disorders and schizophrenia present and lifetime version-Turkish version (K-SADS-PL-T) [7] and treated with long-acting methylphenidate 10 mg per day.

The patient's attention increased and the sitting time at the beginning of the lesson was also prolonged. She had a good response to the methylphenidate treatment from the first day, but on the second day of the treatment, she secretly took her friend's pen and put it in her own bag. Her family thought that this was temporary, and continued the treatment, but when she started stealing something that she didn't need every day for a week, they applied to the polyclinic. This symptom was evaluated as an adverse effect of methylphenidate. After that methylphenidate treatment was discontinued. Two days later, kleptomania disappeared. After not stealing anything for two weeks, her family started giving methylphenidate again. Then the symptoms of kleptomania started again. Her family did not approve of starting another drug for the patient whose urge to steal was completely stopped after the drug was stopped again. The evaluation of the Naranjo adverse drug reaction (ADR) probability scale [8] was 9.

Psychiatric background: She had no mood disorders, eating disorders, obsessive-compulsive disorder, personality disorder, or antisocial conduct.

DISCUSSION AND CONCLUSION

MPH has been the first line psychopharmacological treatment in children and adolescents with ADHD and results in significant improvement in 70–80% of affected children [9]. Nausea, decreased appetite, weight loss, and sleep disturbances are among the most frequently reported side effects during MPH treatment [9]. Besides these common side effects, MPH has also been reported to cause some unusual side effects such as hallucinations, hypersexuality or inappropriate sexual behaviors, skin eruptions, manic/psychotic reactions, and obsessive-compulsive symptoms [10-14]. These side effects may cause treatment noncompliance and may have important medical and/or mental health consequences. Therefore clinicians treating children should be familiar with the emergence and management of these unusual side effects.

When the literature is reviewed, although there are some studies reporting cases of methylphenidate-induced obsessive compulsive disorder (OCD), only one study in which compulsive stealing was observed was found [15].

The authors noted that compulsive behavior, resembling typical OCD, was more common with dextroamphetamine when compared with methylphenidate. Further, it was observed that compulsive behaviors associated with tics were seen only with methylphenidate [11].

Whenever a child who is on stimulants presents with new-onset OCD, the association of OCD with stimulants must be suspected before considering an independent diagnosis of comorbid OCD. In such situations, the stoppage of methylphenidate must be considered as a first step in the management of compulsive stealing; however, if the symptoms of OCD persist, then the addition of anti-obsessional agents such as selective serotonin reuptake inhibitors may be considered.

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