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ATTENTION DEFICIT DISORDER AND HIERATIVITY ASSOCIATED WITH THE USE OF MULTIPLE DRUGS: THERAPEUTIC CHALLENGE

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ABSTRACT

Attention Deficit Hyperactivity Disorder (ADHD) is often associated with the use of psychoactive substances, which aggravates the clinical condition of individuals. The case of a patient with a history of chemical dependency and ADHD illustrates how comorbidity hinders diagnosis and effective treatment, as well as highlighting the importance of integrated interventions.

Keywords: ADHD. Chemical Dependency.

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INTRODUCTION

Attention Deficit Hyperactivity Disorder (ADHD) is a neuropsychiatric condition characterized by inattention, hyperactivity, and impulsivity. Studies indicate that individuals with ADHD are more predisposed to developing substance use disorders (SUD), including alcohol, marijuana, cocaine, and crack. This comorbidity represents a significant challenge for public health, due to the associated clinical and social implications1,2.

The association between ADHD and psychoactive substance use has been widely documented. Research suggests that individuals with ADHD are two to three times more likely to develop substance dependence compared to the general population. This relationship can be attributed to factors such as impulsivity, search for new sensations, and attempts at self-medication to relieve the symptoms of the disorder3.

Multi-drug use, or polydrug use, is particularly prevalent among individuals with ADHD. Studies indicate that the combination of substances, such as alcohol, marijuana, cocaine and crack, is common in this population, increasing the risks of medical, psychiatric and social complications. The impulsivity characteristic of ADHD can lead to the indiscriminate use of multiple substances, potentiating adverse effects1-3.

Marijuana is one of the most frequently used substances by individuals with ADHD. Some studies suggest that these individuals may use marijuana as a way to relieve symptoms of inattention and hyperactivity. However, marijuana use is associated with cognitive deficits and may exacerbate ADHD symptoms, as well as increase the risk of developing other psychiatric disorders4.

Cocaine and crack cocaine use among individuals with ADHD is also a cause for concern. These stimulants act on the dopaminergic system, similar to the mechanism of action of some medications used in the treatment of ADHD. However, the recreational use of cocaine and crack is associated with a high potential for dependence and several adverse health effects, including cardiovascular and neuropsychiatric problems5,6.

Alcohol is another substance commonly consumed by individuals with ADHD. Studies show that these individuals are more likely to abuse alcohol, which can lead to consequences such as impairments in social and occupational functioning, in addition to increasing the risk of accidents and impulsive behaviors. The combination of alcohol with other drugs increases health risks7.

The concomitant presence of ADHD and SUD complicates the diagnosis and treatment of both disorders. Overlapping symptoms can make it difficult to accurately identify conditions, and substance use can interfere with the efficacy of pharmacological

and psychotherapeutic treatments for ADHD. Therefore, integrated approaches that consider both conditions are essential for the effective management of these patients2,6,7.

Early interventions and prevention strategies are key to reducing the risk of developing SUD in individuals with ADHD. Proper diagnosis and treatment of ADHD can decrease the likelihood of substance use, especially when combined with psychosocial education and support programs. In addition, continuous monitoring and follow-up of substance use behaviors are recommended1,3,4.

Research on the relationship between ADHD and multidrug use continues to evolve. Recent studies have explored genetic, neurobiological, and psychosocial factors that contribute to this comorbidity, with a view to developing more effective interventions. Understanding the mechanisms underlying this association is crucial for devising targeted treatment and prevention strategies.

METHODOLOGY

A literature review was carried out, associated with an interview with the patient, who consented to share her current and previous social and health situation, allowing the correlation of what has been published in databases on the subject, and the patient's personal experience of the reported case.

CASE REPORT

A 25-year-old female patient comes to an outpatient consultation with psychiatry, whose follow-up has been done regularly for about 1 year, spontaneously. He reports that in the last few days he has been doing well, continues to abstine from drug use and has not noticed damage in daily life related to the diagnosis of ADHD.

Asked about the history of the ADHD diagnosis, she says that she only remembers that it occurred in childhood, around 11 years of age, after being expelled from the elementary school where she attended the 5th grade of elementary school; She reports that since the beginning of her studies, she has always had a lot of difficulty concentrating and got low grades.

Still on the diagnosis, she says that she never used specific medication for the disease, neither in childhood nor in adulthood. Asked about other comorbidities, she reported only hyperthyroidism, which is treated with daily doses of tapazole, a medication that, according to the patient, is used regularly.

Questioned about the use of drugs, the patient reports that she came into contact with illicit substances through acquaintances and family members who used them, and

progressively became dependent on alcohol, marijuana, cocaine and crack. She also says that after her mother's death, her addictions worsened severely.

She reports having noticed a pattern of forgetfulness and significant worsening of concentration after the use of substances, perceived by the people around her, who, according to her, complained of worsening of the patient's well-known symptoms of inattention; According to the patient's verbal report, about 24 hours after the consumption of cocaine or crack, the symptoms began to go into remission, although the psychostimulant characteristic of the drugs had passed for a longer time.

7 years ago, after a long period of addictions, she began to receive specialized follow-up for the treatment of chemical dependency and, according to the patient's report, she has been free of the consumption of these substances since then, except for her addiction to cigarettes, which she consumes daily; However, she lives in a house with other people who use substances, such as cocaine and crack, on a daily basis, however, she says she is not attracted to use it again.

When asked about resistance to the use of medications that could improve ADHD symptoms throughout life, the patient says that she does not feel enough negative effects to justify the use of any medication, and as she does not intend to go back to school, she believes that a new drug, even if aiming at a therapeutic benefit, could further burden her already weakened body due to the exacerbated consumption of illicit substances in the past.

DISCUSSION

The relationship between Attention Deficit Hyperactivity Disorder (ADHD) and the use of psychoactive substances is complex and bidirectional. Individuals with ADHD are more likely to use drugs, and the consumption of these substances can exacerbate the symptoms of the disorder, creating a vicious cycle that hinders treatment and recovery4-6.

Treatment resistance in patients with ADHD who use drugs is a significant clinical challenge. The consumption of substances such as marijuana, cocaine and alcohol can interfere with the effectiveness of medications prescribed for ADHD, in addition to compromising adherence to treatment. Studies indicate that the concomitant presence of ADHD and substance use disorder (SUD) is associated with an earlier onset of drug use, a faster course, and less response to treatment8,9.

Self-medication is a phenomenon observed in patients with ADHD, where the individual resorts to the use of drugs in an attempt to relieve the symptoms of the disorder. For example, some patients report that marijuana provides a calming effect, reducing

internal restlessness. However, this relief is temporary and can lead to the development of dependence, in addition to worsening the clinical condition in the long term9.

The use of cocaine and crack cocaine in individuals with ADHD is of particular concern. These stimulants act on the dopaminergic system, similar to the mechanism of action of some medications used in the treatment of ADHD. However, the recreational use of cocaine and crack is associated with a high potential for dependence and several adverse health effects, including cardiovascular and neuropsychiatric problems7-9.

The concomitant presence of ADHD and SUD complicates the diagnosis and treatment of both disorders. Overlapping symptoms can make it difficult to accurately identify conditions, and substance use can interfere with the efficacy of pharmacological and psychotherapeutic treatments for ADHD. Therefore, integrated approaches that consider both conditions are essential for the effective management of these patients6,10.

Early interventions and prevention strategies are key to reducing the risk of developing SUD in individuals with ADHD. Proper diagnosis and treatment of ADHD can decrease the likelihood of substance use, especially when combined with psychosocial education and support programs. In addition, continuous monitoring and follow-up of substance use behaviors are recommended10.

In conclusion, the relationship between ADHD and multidrug use is complex and multifaceted. Individuals with ADHD are more vulnerable to the development of SUD, including the use of alcohol, marijuana, cocaine, and crack. Integrated approaches that consider the particularities of this comorbidity are essential for the effective management and improvement of the quality of life of these patients.

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