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REVIEW ABOUT COMORBIDITIES OF BEHAVIOURAL DISORDERS IN CHILDREN AND ADOLESCENTS: THE FOCUS ON ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

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ABSTRACT

Disruptive behavior disorders (DBD) present high comorbidity rate mainly for opposite-defiant disorders that are frequent among children, adolescents and adults affected by with attention deficit and hyperactivity disorder (ADHD), probably as result of common temperamental risk factors such as attention, distraction, impulsivity. ADHD tend to manifest in about 50% of individuals diagnosed as disruptive behavioral disorders.

Keywords*: Behavioural disorders, comorbidities, ADHD.*

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Background

Disruptive behavior disorders (DBD) present high comorbidity rate mainly for opposite-defiant disorders that are frequent among children, adolescents and adults affected by with attention deficit and hyperactivity disorder (ADHD), probably as result of common temperamental risk factors such as attention, distraction, impulsivity. ADHD tend to manifest in about 50% of individuals diagnosed as disruptive behavioral disorders[(1-6)].

Actually, ADHD is included in the DSM-5 chapter of neurodevelopmental disorders and defined as a persistent pattern of inattention and/or hyperactivity-impulsivity interfering with the normal functioning or development[(1-6)].

Inattention tends to manifests as inability to remain focused on a certain task, easy distraction, lack of perseverance, difficulty in paying attention to details, and organizing tasks or other daily activities. This inattention is not caused by a challenging attitude, as can be the case in provocative opposition disorder or lack of understanding[(7-15)].

Hyperactivity refers to excessive motor activity in contexts and places when inappropriate, therefore the subject fails to stand still, and even when it is stopped shaking, moving hands or feet, often leaves the place in situations where he/she must be sitting (i.e. school, work), but hyperactivity can also be manifested as extreme loquacity[(16-20)].

Impulsivity refers to the inability to reflect, mediate, and possibly expel behavioral responses,

taking into account the needs defined by the context. The subject does not think before acting, cannot waiting for their turn in games or activities, intrudes into the games and activities of others in an intrusive way or in interrupting conversations[21-30].

Depending on which symptom is most expressed, the DSM-5 distinguishes the ADHD in three categories: if there are both signs of inattention, hyperactivity and impulsivity, we have a combined manifestation, if there is only neglect, we talk about manifestation with predominant inattention , and finally the presence of hyperactivity and impulsiveness without any negligence outlines a manifestation with predominant hyperactivity / impulsivity[31-50].

On the other hand, the ICD-10 defines attention deficit and hyperactivity disorder as hyperkinetic disorder (code F90), whose diagnosis requires simultaneous inattention, impulsivity and hyperactivity. Additionally, DSM-5 includes mild forms, if there are few symptoms or if they cause minor compromises in the overall functioning of the subject, serious forms if the symptoms are many or involve marked functional impairment, and moderate forms of horseback between the mild forms and those serious. Attention deficit and hyperactivity disorder begins in childhood, in fact the symptoms must occur before 12 years, without specifying an early onset due to the difficulty in establishing the exact moment in which the symptoms appear. Disturbance events must be present in multiple contexts (eg home and school, work) for more than six months, and must interfere with the normal social or work performance of the subject. The symptoms of ADHD tend to have some evolution over time: in preschool age the main manifestation is hyperactivity, while in primary school the prevalence of inattention becomes impacting[51-70].

During adolescence, signs of hyperactivity are less common and leave more room for inner agitation, restlessness, and an inner sensation of nervousness. In adulthood tend to persist in inactivity and impulsiveness, which express themselves in making important decisions without considering the long-term consequences, in a daunting way, of accepting a job without information. Population studies indicate that ADHD is present in most cultures in about 5% of children and 2.5% in adults.

In the general population, ADHD is more common in males with an approximate ratio of 2: 1 in children and 1.6: 1 in adults. Females also tend to have males to show primarily inattention features. Among the risk factors for the development of the ADHD plays an important role in the presence of familiarity, especially the presence of this disorder in the parents of affected people is very high[49-61].

Etiology

ADHD's inheritance is consistent even though no specific genes involved in genesis have been identified this disorder. Among the relevant causes, we can assume that the very low birth weight (<1500g) represents a doubled or tripled risk of developing this disorder, but on the other hand, most children with low birth weight will not develop ADHD. Exposure to toxic environmental factors during intrauterine life such as alcohol, cigarette smoking and childhood contact with neurotoxic substances (such as lead) or infections (encephalitis) are related to subsequent development of ADHD but It is not known whether they are related to a causal relationship. In children with this disorder can also be present a history of abuse during childhood, neglect and multiple adoptions[49-61].

ADHD outcomes

ADHD children show reduced school outcomes as a result of attentive difficulties, and will also be rejected by their companions because they are considered annoying or lazy because of their impulsive behavior and hyperactivity. Family relationships are often characterized by discord and negative interactions that, together with peer rejection, can lead to adolescence to develop comorbidity in a behavioral or mood disorder and in adulthood an antisocial personality disorder, increasing both the risk of Suicide attempts that are likely to develop substance abuse disorders and get into jail. Moreover, individuals with ADHD reach a lower level of schooling and have less personal success. In the diagnostic test, once established that symptoms of hyperactivity, impulsivity, and / or discomfort reach a level that meets the criteria for diagnosing ADHD, it is necessary to rule out that these do not fall into other diagnostic categories, often for example children with intellectual disabilities Presenting hypercinetic behaviors, poor pulse control or easy distraction, but secondary, or cognitive-like difficulties. In children with anxiety disorders there is great difficulty in concentration and high levels of activity, even in this case secondary to an anxious background picture. A highly impulsive behavior is present in intermittent explosive disorder which is, however, rare in infancy. An increase in motor activity is also present in other neurode-

velopmental disorders such as stereotyped motion disorders and in some cases of autistic spectrum disorder, but in these cases the motions are fixed, stereotyped while in the ADHD the motor hyperactivity is typically generalized. Inattention can also be observed in children with specific learning disabilities, but in these cases it is more due to frustration and is still limited to the school context. Many children with mood disorders exhibit increased levels of activity, poor pulse control and difficulty concentrating, but in this case they are also attributed to mood disorder.

ADHD is also common as comorbid disorders, first of all the provocative opposition disorder that occurs in concomitant use in half the children with ADHD. A disorder of conduct can occur in about a quarter of children or adolescents with ADHD. The specific learning disorder commonly occurs in conjunction with ADHD, while less commonly the disorder of disruptive mood disorder, anxiety disorder, major depressive disorder, intermittent explosive disorder, obsessive-compulsive disorder, Tic disorders, and autistic spectrum disorders. Adulthood may occur in conjunction with the ADHD for substance abuse, even if in a minority of cases, antisocial personality disorder and other personality disorders. By referring to the comorbidity of disruptive behavioral disorders, often provocative opposition disturbances.

The disorder of conduct, although this seems to be more common in children with childhood recurrence. Individuals with provocative opposition disorder are also at greater risk of anxiety disorders and more depressive disorder, and this seems largely attributable to the presence of symptoms of anguish / irritability. Adolescents and adults with provocative opposition disorder also exhibit a higher rate of substance use disorders, although it is unclear whether this association is independent of comorbidity with the behavioral disorder.

How long it is common to find provocative opposition disorder and attention deficit and hyperactivity disorder, and this comorbid situation predicts the worst outcomes. Individuals with personality features associated with antisocial personality disorder often violate the fundamental rights of others or the main age-appropriate social norms, and consequently their patterns of behavior often meet the criteria for behavioral disorders. This may also coexist with one or more of specific learning disorders, anxiety disorders (depressive or bipolar), and substance-related disorders.

School outcomes, particularly in reading and other verbal skills, are often inferior to those expected by age and intelligence and can justify the additional diagnosis of specific learning disorder or communication disorder[71-100].

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