Concordances between autism spectrum disorders and attention deficit hyperactivity disorder

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Abstract

INTRODUCTION:
The current literature acknowledges an overlap of genetic, clinical and neuropsychological aspects between autism spectrum disorder (ASD) and attention deficit hyperactivity disorder (ADHD), suggesting that there may be a common pattern that covers features ranging from the common genetic and structural etiology to shared patterns of symptoms.

AIM:
To review the current advances in these common aspects.

DEVELOPMENT:
Several studies have pointed out preschool attentional difficulties as the basis of both disorders. From the genetic perspective, it is estimated that 50-72% of the genetic factors overlap between the two disorders. They also share a decrease in the volume of the corpus callosum and left frontal grey matter, as well as functional alterations such as dorsolateral prefrontal, striato-thalamic and superior parietal hypoactivation. Results are also found regarding executive functioning, with differential profiles for the two conditions, and also concerning the relationship between the repetitive and impulsive behaviors in the early stages of ASD and ensuing problems of hyperactivity.

CONCLUSIONS:
This new conception of the ASD-ADHD continuum, with a common neurodevelopmental basis and associated clinical features, could be of great use in clinical practice. It is suggested that this association should be taken into account when it comes to deciding on the treatment.