
DOPAMINE TRANSPORTER 3'UTR VNTR GENOTYPE AND WISCONSIN CARD SORTING TEST IN CHILDREN WITH ADHD AMONG EGYPTIAN POPULATION

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Background: ADHD is the most commonly diagnosed behavioral disorder of childhood, and that it occurs in 3 to 5 percent of school-age children, this means that it affects a great part of the Egyptian population. The etiology of ADHD is unknown. Therefore understanding the etiology and pathogenesis of ADHD is a key and important challenge in psychiatry.

Method: To investigate the relationship between the dopamine transporter gene (SLC6A3) 3'-UTR VNTR genotypes and Wisconsin Card Sorting Test in children with ADHD versus control, 50 children diagnosed with ADHD and 50 of control children were sequentially recruited, genotyped, and tested using neuropsychological tests .

Results: There were significant differences in Total Category First Completed (TCFC) and categories completed indices of WCST results between cases and control.. No significant difference in genotype of DAT 3'UTR VNTR genotypes was found between cases and control. The most common genotype among both ADHD cases and control was 9/10 while the least genotype was 9/9 among both groups. No significant genetic correlation and WCST indices in ADHD children.

Conclusion: There is impairment of set shifting domain of executive function in ADHD children. No significant genetic correlation and WCST indices in ADHD children