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Study of Dat 10/10 in Family Cohort

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The dopamine transporter (DAT) is a functional element of the dopaminergic synapse in the brain. Its primary role is the regulation of dopamine (DA) availability. The DAT gene and especially the DAT 10/10 genotype have been intensively discussed as a candidate for several neuropsychiatric disorders including attention-deficit-hyperactivity disorder (ADHD).

Our previous research suggests the association of genes DRD2, DAT1, DBH and 5-HTT with ADHD (P<0,05) - case control study. DAT1 correlates with ADHD in our family based study (P<0,05).

Data from current family-based study denoted that transmission of polymorphisms in the genes DRD3 (allele 2), 5-HTT (VNTR), DBH 444A and DRD4 -512 is exclusively from father to son. In case of mothers, maternally transmission of ADHD is more or less insignificant.

50 ADHD patients from family based study presented polymorphism 10/10. We present new data of neuro imaging (nucleus caudatus, nucleus lentiformis) and some psychological scales in these groups compare to norm healthy controls of same age.

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