

Tourette syndrome and co-morbidity

Diagnostic process and impact of psychosocial consequences, severity of tics, pharmacological treatment, and intelligence

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ABSTRACT

Tourette syndrome (TS) is a hereditary, chronic, neurobiological disease, characterized by the presence of motor and vocal tics. It is often accompanied by co-morbidities, such as attention deficit hyperactivity disorder (ADHD), obsessive compulsive disorder (OCD), rage attacks, depressive symptoms, sleeping disturbances, stuttering, and symptoms of seasonal affective disorder.

The aims of this PhD project were to assess the rate of the named co-morbidities, to examine the diagnostic process, and to examine the psychosocial consequences, severity of tics, intelligence, and pharmacological treatment in children with TS and their relation to co-morbidities.

In total, 314 children with TS and 81 healthy children participated in the research project. Besides a structured interview, validated methods were used to assess co-morbidities, intelligence and severity of tics.

In only 40 % of the children, tics were the presenting symptoms; in other cases TS presented with symptoms of one of the co-morbidities. Diagnosis was delayed in 1.8 years. The rate of co-morbidities was high. Only 10.2 % of the children did not have any of the examined co-morbidities. The rate of TS-related social and educational problems was high in children with TS and statistically significant higher than in the healthy control group. If ADHD and/or OCD were present, the rates of other co-morbidities were significantly higher than if ADHD and/or OCD were absent, and there were more educational and social problems, a higher number of tried medications, a higher number of children receiving pharmacological treatment, and more severe tics. Children with TS had lower IQ scores than the general population and the control group. The presence of co-morbidities did not influence IQ scores significantly.

An improved knowledge about the natural course of TS will facilitate an earlier diagnosis of TS and thereby an earlier initiation of the support. Professionals should be aware of the neuropsychological consequences of TS and of the high rate of co-morbidities, and their impact on social and educational consequences. Focus on these consequences will create the best conditions for the development of children with TS and will improve quality of life for the children and their families.