

Case Blog

Title: Tourette Syndrome

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Introduction

Tourette syndrome is an inherited neuropsychiatric disorder with onset in childhood; it is characterized by multiple motor tics and at least one vocal tic. The occurrence of tics wax and wane with time can be suppressed voluntarily and are frequently preceded by a premonitory urge. Tourette is defined as a part of spectrum of tic disorders which include provisional, transient or persistent tics. The prevalence of tourette is 0.4% to 3.8% among children between 5 to 18 years [1]. The tourette syndrome can be associated with use of obscene words and derogatory remarks but this is present in only a few cases [2]. Eye blinking, coughing, throat clearing, sniffing and facial movements are the common type of tics. Tourette does not affect intelligence or life expectancy. Tourette is often associated with comorbid condition such as attention deficit hyperactivity disorder (ADHD) and obsessive compulsive disorder(OCD). These conditions often cause more functional impairment than the tics.

Case Study

6 year old female patient presented in the ENT opd with recurrent sore throat. On examination bilateral tonsillitis was seen. During examination frequent blinking of eyes, grimacing, frowning and frequent protrusion of tongue was observed. The mother gave history of increased irritability, reduced sleep and appetite and frequent use of obscene words in public places for last 2 years. The family members ignored these symptoms. The patient was referred to psychiatry department. Urine drug analysis, serum ceruloplasmin, complete hemogram, sugar, urea, creatinine and liver function test was within normal limits. The child was diagnosed to be suffering tourette syndrome. The patient was offered psychobehavioral therapy and education and reassurance to the family members. The patient was also prescribed tab. fluoxetine (200mg) ½ tab daily. The patient received this treatment for 6 months and showed significant improvement. Bilateral tonsillectomy was done 1 year later.

Discussion

According to the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5), Tourette's may be diagnosed when a person exhibits both multiple motor and one or more vocal tics over the period of a year; the motor and vocal tics need not be concurrent. The onset must have occurred before the age of 18, and cannot be attributed to the effects of another condition or substance (such as cocaine) [3]. Hence, other medical conditions that include tics or tic-like movements—such as

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autism or other causes of tourettism—must be ruled out before conferring a Tourette’s diagnosis.

The exact cause of Tourette’s is unknown, but it is well established that both genetic and environmental factors are involved [4]. Genetic epidemiology studies have shown that the overwhelming majority of cases of Tourette’s are inherited, although the exact mode of inheritance is not yet known and no gene has been identified [5]. In other cases, tics are associated with disorders other than Tourette’s, a phenomenon known as *tourettism* [6].

The exact mechanism affecting the inherited vulnerability to Tourette’s has not been established, and the precise etiology is unknown. Tics are believed to result from dysfunction in cortical and subcortical regions, the thalamus, basal ganglia and frontal cortex [4]. Neuroanatomic models implicate failures in circuits connecting the brain’s cortex and subcortex,

The treatment of Tourette’s focuses on identifying and helping the individual manage the most troubling or impairing symptoms. Most cases of Tourette’s are mild, and do not require pharmacological treatment; instead, psychobehavioral therapy, education, and reassurance may be sufficient [7]. Treatments, where warranted, can be divided into those that target tics and comorbid conditions, which, when present, are often a larger source of impairment than the tics themselves. Not all people with tics have comorbid conditions, but when those conditions are present, they often take treatment priority.

Conclusion

Children with Tourette’s may suffer socially if their tics are viewed as “bizarre”. If a child has disabling tics, or tics that interfere with social or academic functioning, supportive psychotherapy or school accommodations can be helpful. Because comorbid conditions (such as ADHD or OCD) can cause greater impact on overall functioning than tics, a thorough evaluation for comorbidity is called for when symptoms and impairment warrant. A supportive environment and family generally gives those with Tourette’s the skills to manage the disorder. People with Tourette’s may learn to camouflage socially inappropriate tics or to channel the energy of their tics into a functional endeavor. Accomplished musicians, athletes, public speakers, and professionals from all walks of life are found among people with Tourette’s. Outcomes in adulthood are associated more with the perceived significance of having severe tics as a child than with the actual severity of the tics. A person who was misunderstood, punished, or teased at home or at school will fare worse than children who enjoyed an understanding and supportive environment. We as ENT professionals are one of the first to be consulted regarding various childhood problems like otorrhoea, sore throat, earache . A thorough knowledge and meticulous examination can help us to diagnose tourette syndrome at an early stage of life and treat it accordingly.

References

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