M.I.N.D

TIC DISORDERS

TIC DISORDERS

Disorder name

TIC DISORDERS

Introduction

Tics may range from a discrete, hardly noticeable blinking of the eye to painful, socially incapacitating and subjectively shameful phenomenainvolving several muscle groups. Those afflicted by tics, as well as theirfamily, may experience substantial suffering due to the symptoms, be it throughbullying or to inappropriate response by caregivers resulting in a dysfunctionalparent-child relationship. People in the extended environment may also react withirritation, for instance where vocal tics occur in inappropriate settings, such asthe cinema or the classroom. On the other hand, some of the people afflictedsuccessfully develop strategies to control their tics and learn to live and cope withthem.

Overview and facts

It is estimated that 4% to12 % of all children suffer from tics at some timeduring their development. Approximately 3%-4% are afflicted by a chronic tic disorder and 1% with Tourette's syndrome.Children and adolescents are 10 times more likely to suffer from tics than adults. Boys are afflicted three to four times more often than girls. A familial predisposition has been established. The prevalence of Tourette syndrome is about 1% worldwide.

Age at onset and course

Tics generally occur for the first time between the ages of two and 15 years. However, the peak age of onset is between six and eight years. Typically, the firstsymptom is a simple motor tic in the face, such as eye blinking or grimacing. With time, they spread to shoulders, neck, extremities and torso. Often vocal tics appear twoto four years after the start of the motor tics. As a result, children and adolescents are 10 times more likely to be affected than adults.

With increasing age, tic-afflicted patients also gain better control overtheir tics and are often able to suppress them for minutes or up to several hours.However, after a period of suppression, patients often feel compelled to exhibittheir tics with heightened intensity. For this reason some children may be able to suppress their tics over the course of the school daybut, as soon as the child arrives at home, tics reappear with more intensity and thefeelings of heightened tension generated by the suppression of tics will temporarily fade.

Almost 50% of children and adolescents with Tourette's Disorder have coexisting obsessions or compulsions (OCD) and/or ADHD.

The severity of the tic disorder during childhood only has a limited predictivevalue concerning the illness in adulthood. A poor prognosis is usually associatedwith:

- Familial history
- Existence of vocal or complex tics
- Comorbid hyperkinetic disorder
- Obsessive-compulsive symptoms
- Aggressive behavior against self or others.

Symptoms

Whether a transient or a chronic tic disorder is present depends on the duration of symptoms: in the case of a transient tic disorder, symptoms last less than 12 months.

M.I.N.D

Tic Disorders

Transient tic disorders mostly occur in school age children and usually do not require specific treatment. Diagnosis of Gilles-de-la-Tourette syndrome (or simply Tourette syndrome or disorder) is warranted in cases where several motor tics and at least one vocal tic are present at some time or have been present in the past. Motor and vocal tics do not have to be present at the same time but should have occurred almost everyday over one year at least to warrant the diagnosis. The onset of Tourette syndrome is generally before the age of 18; it rarely occurs for the first time in adulthood.

Tics are sudden, abrupt, fast movements comprising various muscle groups, with or without vocal utterances, which occur involuntarily. Tics are brief but repetitive – though not rhythmic – and usually appear in short bursts or even series. Motor tics range from simple, sudden movements such as eye blinking or grimacing, to complex behavioral patterns, for example crouching down or hopping. In extreme cases, complex motor tics may present themselves as obscene gestures.

Vocal or phonic tics are involuntary utterances of sounds, noises, sentences or words. A simple vocal tic may be a slight coughing, clearing of throat, wheezing, squeaking or loud shouting.

Causes and risk factors

Although the cause of primary tic disorders has not been conclusivelydetermined, it is widely assumed to be the result of an interaction of genetic,neurobiological and psychological factors as well as environmental influences.
It seems that over-activity of the dopaminergic system inthe basal ganglia leads to deficient subcortical inhibition and impaired automaticcontrol of movement, which then clinically presents itself as motor or vocal tics.
A familial predisposition is as a risk factor. Heritability has been estimatedto be around 50 %. Various prenatal, perinatal andpostnatal factors are considered possible factors that increase the risk. They includepremature birth, perinatal hypoxia, low birth weight as well as excessive nicotineand caffeine consumption by mother during pregnancy.

Differential diagnosis and comorbidity

Specific circumstances may cause variation of tic symptoms. Emotionalstates such as fear, joy or tension frequently lead to an increase. Distractions, or an occupation requiring high concentration may lead to a decrease.
Almost 50% of children and adolescents with Tourette's Disorder have coexisting obsessions or compulsions (OCD) and/or ADHD.

Tests and diagnosis

There's no specific test that can diagnose tics. Instead, doctors must rely on the history of symptoms to diagnose the disorder.
Diagnosis of tics may be delayed because families and even doctors are sometimes unfamiliar with the symptoms, or the symptoms may mimic other problems. Eye blinking may be initially mistaken for eye or vision problems, for instance, while nose sniffling may be attributed to allergies, colds or sinus problems.
Because other serious health conditions can cause motor or vocal tics, your doctor may suggest having tests to rule out other causes. These tests include blood tests or neuroimaging studies, such as magnetic resonance imaging (MRI).

Treatment

Medication

Pharmacological treatment is recommended whentics result in significant subjective discomfort, such as muscular pain or physicalinjury, ongoing social problems (e.g., isolation or bullying), emotional problems,or significant functional impediment, typically in academic performance. The aim is to achieve the best balance between maximum benefit andminimum side effects. It is not to be expected that tics will disappear completelywith medication; at best, symptoms will be alleviated.

Additionally,it is important to assess whether the tic disorder or another comorbid disorderis causing the greatest impairment, in order to determine which of the disordersshould be primarily treated. For instance, treating comorbid ADHD can result inimproved ability to suppress the tics without having to specifically treat them –conversely, psychostimulant drugs may rarely worsen the tics.

Psychotherapy

Cognitive behavioral methods are the most effective type of psychotherapeutic intervention. This treatment should be administered by trained professionals. But doing therapy alone (without medications) may not be effective except in very mild cases.

Sources and Links

http://www.tourettesyndrome.net/
http://www.tourettes-action.org.uk/
http://www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/Facts_for_Families_Keyword.aspx