

Life in Motion Tics and Tourette's Syndrome Fact Sheet

Overview of Tics

Tics are quick, sudden, senseless movements (motor tics) or sounds (vocal tics). Tics are involuntary and cannot easily be controlled.

Tics may be simple:

- | <u>Motor</u> | <u>Vocal</u> |
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| • Eye blinking | Throat clearing |
| • Face grimacing | Grunting |
| • Shoulder shrugging | Sniffing |
| • Head jerking | Barking |

Or tics may be complex:

- | <u>Motor</u> | <u>Vocal</u> |
|-----------------|----------------------------------|
| • Jumping | Repeating what someone else says |
| • Hopping | Repeating one's own words |
| • Touching | Involuntary use of foul language |
| • Squatting | |
| • Hand gestures | |

In addition, tics: are common in children; appear in early childhood (about 6 to 7 years); typically come and go; are usually made worse by stress, anxiety, or being tired; may lessen when concentrating on an activity (reading a book or playing a video game); are usually not present during sleep; may be preceded (in teenagers and adults) by an urge or sensation, which goes away when the tic is performed; can be briefly held back or delayed; and are often better when a child becomes a teenager or young adult.

Overview of Tourette's Syndrome

To be called Tourette's syndrome (TS):

- The tics must start before the person is 21 years old.
- The tics must be present for at least 12 months.
- The person must have two or more motor tics and one or more vocal tics. Some people with TS have both types of tics at the same time. Others have motor tics at one time and vocal tics at another time.
- The tics must come and go.
- There must be no other medical cause for the tics.

TS is common. About 1 to 10 out of every 1,000 children or teenagers have TS. Other conditions that occur more often than not in patients with TS include:

- | | |
|-----------------------------------|------------------------|
| • Trouble paying attention | • Learning problems |
| • High activity levels | • Behavior problems |
| • Difficulty controlling impulses | • Being anxious or sad |
| • Obsessive compulsive behaviors | • Sleep problems |

Things to consider when children with tics have problems in school or with social activities:

- Children might be embarrassed when other people see or copy their tics.
- Tics might interrupt motor activities or talking or might cause physical problems.
- Children might have trouble paying attention, have high activity levels, or trouble controlling their urges (ADHD).
- Children may have learning problems or may need to do their work in a specific way or repeat an activity a certain number of times (obsessive-compulsive behavior).
- Children may require extra time to complete tests.
- Children may have anxiety or depression.

Diagnosis of TS

There are no special tests to tell a doctor if someone has TS. Doctors must talk with the family and the child and perform an examination to determine whether the patient meets the requirements for this diagnosis. Some patients can have a tic disorder consisting only of motor or vocal tics.

Causes of TS

No one knows exactly what causes TS. Possible causes include: passed from parents to their children (genetic); a problem with a chemical in the brain that controls movement; or environmental factors, including the possibility of an infection.

Treatment of TS

The goal of treatment is to help the person live as “normally” as possible. Teaching parents, the child, and the child’s teachers, classmates, and friends about TS is very important. The doctor should understand all of the child’s problems and, when necessary, direct treatment to each specific problem.

Children might need medication if their tics interfere with school or daily social activities or are physically harmful. If the tics are not causing problems, then medicines, which block chemicals in the brain, should not be used. Low doses of certain antipsychotic (dopamine receptor antagonist) medications, also known as neuroleptics may be prescribed. These may include haloperidol (Haldol[®]), pimozide (Orap[®]), fluphenazine (Prolixin[®]), and risperidone (Risperdal[®]). The lowest amount of these drugs should be used. Behavioral treatment may also be helpful in controlling the tics. For some patients with tics or TS, motor tics may be treated with a chemical agent known as botulinum toxin type A (BOTOX[®]) or botulinum toxin type B (Myobloc[™]), which is injected into the affected muscle or muscles.

Children with TS may also need behavioral therapy or medications for coexisting problems such as attention-deficit hyperactivity disorder or obsessive-compulsive disorder. Children with TS should have plenty of sleep. Medicines that are used to treat attention problems, like methylphenidate and dextroamphetamine, usually do not make tics worse.

Questions to Ask Your Doctor

- What should I tell my child’s teachers about tics?
- Will my child outgrow Tourette’s syndrome?
- Are there any things besides medication that might make tics better?
- How can I contribute to research studies on tics or Tourette’s syndrome?

If you would like more detailed information on the symptoms, diagnosis, and treatment options or additional support (such as discussion forums and chat rooms), please visit www.wemove.org.