

# TOURETTE SYNDROME



Tourette Syndrome (TS) is a condition in which people make repeated and sudden movements or sounds in response to a strong urge to do so – what is called a “tic.” The urge they feel is much like the need to sneeze, and producing the tic relieves their discomfort. The tics usually can be suppressed with effort. If the person concentrates on doing something else, the need to produce a tic can be reduced.

Most tics tend to start first in the head and face. Children with TS often blink their eyes, frown, or sneer. Some children repeatedly clear their throat, yelp or yell, or make noises like tongue clicking (vocal tics). They may imitate sounds, or the speech or actions of other people. A small group of individuals may use obscene words or gestures. Others may say rude or inappropriate things to people.

Children or teenagers with more complex tics may feel a need to smell or touch objects. Sometimes they jump or twirl around, jerk their head, or shrug their shoulders (motor tics). About 90% of people with TS have another disorder, like Attention Deficit/Hyperactivity Disorder (ADHD) or Obsessive Compulsive Disorder (OCD) or anxiety. Some children, teenagers, and adults with TS also have depression. It may be that their problems making friends or being rejected because of their tics may make them feel depressed. It is also possible that the same brain problems may be linked to both TS and depression.

The diagnosis of TS is often delayed because the tics are not recognized as symptoms of a disorder. They are thought to be unimportant or just a part of growing up. Sometimes the families of children with undiagnosed TS recognize the symptoms once they read about them or hear about them from other people. They can then get their children proper diagnosis and treatment.

Many children with TS also have learning problems, particularly with reading, writing, and math.

To establish a diagnosis of TS, a person must have multiple motor tics and one or more vocal tics starting before 18 years of age. The tics must be present consistently for at least one year.

## How common is Tourette Syndrome?

About 1% of young people have TS. Males are more commonly affected than females.

## How long does it last?

Onset of tics is usually between ages 4 and 6 years. Tics seem to be at their worst around 11 years of age, and then slowly resolve over time. Although in most children and adolescents tic-related symptoms tend to subside by early adulthood, a small percentage of children (20%) with

TS have persistently severe or worsening symptoms in adulthood.

## What causes Tourette Syndrome?

The cause is not known. There may be some interaction between genes and the environment that leads to the symptoms of TS. The areas of the brain affected are those that have to do with movement and the control of behaviour. The tics can be made worse by fatigue or stress, or even by talking about the tics or seeing someone else with tics.

## What's normal and what's not?

Little twitches, or blinking, or winking over and over again are fairly common in children. They usually disappear as the child matures. There are some children, however, whose tics are more severe and do not disappear over time. This group is often diagnosed with Tourette Syndrome. To establish a diagnosis of TS, a person must have multiple motor tics and one or more vocal tics starting before 18 years of age. The tics must be present consistently for at least one year.

## What treatment is effective?

People with TS should not be told to suppress/hold back their tics. Rather, it is usually best to ignore the tics (except if behavioural therapy is being used). Even without specific treatment, tics are likely to improve by early adulthood. Most tics don't cause problems in everyday life but in some children, the tics interfere with their ability to learn and make friends. For this group, behavioural treatment with Habit Reversal Training (HRT) should be considered first.

If medication is required (when tics are very distressing and interfere with everyday activities), Clonidine and Guanfacine are first choice medications for tics. Risperidone and Aripiprazole are second choice medications for tics.

Medications do not cure TS and only help to hold back the tic or make it less strong while the medication is being used. Some patients also need to discontinue these medicines because of their side effects.

Habit Reversal Training (HRT) is one of the most effective behavioural therapies for TS. In HRT, people learn to recognize the onset of a tic and help stop it. The person learns to replace the tics with a different action or behaviour when they feel the urge to tic. Doing so seems to stop the unwanted movement or behaviour.

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## OTHER RESOURCES:

More resources are available at [offordcentre.com](http://offordcentre.com).

Please visit [offordcentre.com/research/knowledge/resources](http://offordcentre.com/research/knowledge/resources) for websites and books on this topic.



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