
Tourette syndrome

Summary

- Tourette syndrome is a type of neurological disorder characterised by involuntary tics and repetitive vocalisations.
 - The cause is unknown, but theories include genetic factors, bacterial infection and neurochemical abnormalities.
 - Treatment can include medication, relaxation techniques and psychotherapy.
-

Tourette syndrome is a type of neurological disorder characterised by involuntary tics and repetitive vocalisations. It commonly affects people between the ages of two and 21 years, with the majority of cases occurring in children aged four to 12 years. More boys than girls are affected. Research indicates that as many as one in 100 school children may be affected in Australia.

This condition commonly appears first between the ages of two and 12 years. For some people with Tourette syndrome, there may be a lessening of symptoms in late adolescence. It is, however, a lifelong condition that is not degenerative.

Milder forms of Tourette syndrome can be misdiagnosed, as it often occurs at the same time as attention deficit hyperactivity disorder (ADHD), obsessive compulsive disorder and conduct disorder.

While most people with Tourette syndrome are able to exert temporary control over their tics and vocalisations, others may require a combination of medications. Sometimes, Tourette syndrome can spontaneously resolve, for unknown reasons. There is no cure.

The cause of Tourette syndrome is unknown, but theories include bacterial infection, abnormalities in the metabolism of brain chemicals and genetic factors. As stress and emotional overexcitement seem to make the condition worse, learning relaxation techniques can help. Whether or not Tourette syndrome is linked to other disorders (such as ADHD) or learning disabilities (such as dyslexia) is still not scientifically proven.

Symptoms of Tourette syndrome

The symptoms of Tourette syndrome can differ from one person to the next, but may include:

- A variety of tics, such as eye blinking, shrugging and facial grimace – milder forms of Tourette syndrome can be misdiagnosed, as it often occurs at the same time as ADHD, obsessive compulsive disorder and conduct disorders
- At least one involuntary vocalisation such as grunting, sniffing or barking that is repeated over and over
- 'Attacks' of tics and vocalisations, either daily or regularly
- Other behavioural or learning difficulties, such as dyslexia or obsessive compulsive behaviour
- Waxing and waning of the symptoms over several weeks or months.

Levels of Tourette syndrome

Tourette syndrome can be mild, moderate or severe. The intensity of symptoms can change within the person, sometimes on a daily basis. Stress or tension tends to make the condition worse, while relaxation or concentration eases the symptoms. Sometimes, the symptoms come and go over a period of months.

There are two broad levels of Tourette syndrome. These are:

- Simple – a milder version, including tics (such as blinking, sniffing, shrugging and grimacing) and vocalisations (such as grunting and clearing the throat)
-

- Complex – a more severe version, including jumping, spinning in circles and compulsively touching things, and vocalisations such as repeating words or sounds (echolalia) and swearing (coprolalia).

Causes of Tourette syndrome

The exact cause of Tourette syndrome remains a mystery, but research is focusing on a number of possibilities, including:

- Genetic factors – Tourette syndrome seems to be an inherited condition. A child of a person with Tourette syndrome has a 50 per cent chance of developing the condition themselves. Boys are three times more likely to inherit the condition than girls.
- Streptococcal infection – the streptococcus bacterium can cause a wide range of infections, ranging from mild to severe and life threatening. One theory proposes that a particular infection may be responsible for the neurological changes associated with Tourette syndrome.
- Neurochemical abnormalities – the chemicals of the brain (neurotransmitters) seem to be metabolised differently in people with Tourette syndrome, especially the mood regulators dopamine and serotonin.
- Other disorders – researchers are divided on whether or not Tourette syndrome is associated with other disorders (such as ADHD and dyslexia) and obsessive compulsive behaviours. Such disorders often appear together with Tourette syndrome.

Additional difficulties for children with Tourette syndrome

A child with Tourette syndrome may demonstrate other difficulties, such as sleeping problems, poor academic performance at school, low self-esteem and the inability to control their temper.

Most children with Tourette syndrome will have normal intellectual development, but some may have learning difficulties. The social stigma is particularly hard to bear, since people often don't believe that the tics and repetitive vocalisations, particularly swearing, are involuntary.

Diagnosis of Tourette syndrome

Diagnosing Tourette syndrome primarily involves observation of the person's behaviour. Since tics and vocalisations are often vented in the privacy and safety of the home, the doctor may have some initial difficulty witnessing the symptoms in a professional setting like their office or clinic.

Other tests, such as CT scans, are used to make sure the symptoms aren't caused by some other underlying disease.

Treatment for Tourette syndrome

Treatment for Tourette syndrome depends on the severity of the condition. Most people with Tourette syndrome can manage their symptoms themselves, and tend to find a quiet isolated spot to 'vent' the irresistible tics and vocalisations they've been holding back throughout the day.

Others require a variety of medications to help control the symptoms. Generally, the medications are introduced in small doses and slowly increased until the symptoms are managed. Different people need different ratios of medications. Side effects of the medications can include depression, weight gain and persistent tiredness.

As stress seems to make Tourette syndrome worse, learning relaxation techniques is useful. Associated psychotherapy can include learning how to substitute an unacceptable tic, such as swearing, with a more tolerable one.

Where to get help

- Your doctor
- **Tourette Syndrome Association of Australia** Tel. (02) 9382 3726

This page has been produced in consultation with and approved by:

Better Health Channel - (need new cp)

Content on this website is provided for information purposes only. Information about a therapy, service, product or treatment does not in any way endorse or support such therapy, service, product or treatment and is not intended to replace advice from your doctor or other registered health professional. The information and materials contained on this website are not intended to constitute a comprehensive guide concerning all aspects of the therapy, product or treatment described on the website. All users are urged to always seek advice from a registered health care professional for diagnosis and answers to their medical questions and to ascertain whether the particular therapy, service, product or treatment described on the website is suitable in their circumstances. The State of Victoria and the Department of Health & Human Services shall not bear any liability for reliance by any user on the materials contained on this website.

For the latest updates and more information, visit www.betterhealth.vic.gov.au

Copyright © 1999/2019 State of Victoria. Reproduced from the Better Health Channel (www.betterhealth.vic.gov.au) at no cost with permission of the Victorian Minister for Health. Unauthorised reproduction and other uses comprised in the copyright are prohibited without permission.