**What is Tourette Syndrome (TS)?** It is a neurobiological disorder characterized by tics— involuntary, rapid, sudden movements and/or vocal outbursts that occur repeatedly.

**What are the most common symptoms?** Symptoms change periodically in number, frequency, type and severity—even disappearing for weeks or months at a time. Commonly, motor tics may be eye blinking, head jerking, shoulder shrugging and facial grimacing. Vocally: throat clearing, sniffing and tongue clicking.

**What is the cause of the syndrome?** No definite cause has yet been established, but considerable evidence points to abnormal metabolism of at least one brain chemical called dopamine.

**How many people are affected?** As TS often goes undiagnosed, no exact figure can be given. But authoritative estimates indicate that some 200,000 in the United States are known to have the disorder. All races and ethnic groups are affected.

**Is it inherited?** Genetic studies indicate that TS is inherited as a dominant gene, with about 50% chance of passing the gene from parent to child. Sons are three to four times more likely than daughters to exhibit TS.

**Is obscene language (coprolalia) a typical symptom of TS?** Definitely not. The fact is that cursing, uttering obscenities, and ethnic slurs are manifested by fewer than 15% of people with TS. Too often, however, the media seize upon this symptom for its sensational effect.

**Do outbursts of personal, ethnic and other slurs by people with TS reflect their true feelings?** On the contrary. The very rare use of ethnic slurs stems from an uncontrollable urge to voice the forbidden even when it is directly opposite to the actual beliefs of the person voicing it.

**How is TS diagnosed?** Diagnosis is made by observing symptoms and evaluating the history of their onset. No blood analysis, X-ray or other type of medical test can identify this condition. The TS symptoms usually emerge between 5 and 18 years of age.

**How is it treated?** While there is no cure, medications are available to help control TS symptoms. They range from atypical neuroleptics, to neuroleptics, to anti-hyperactive drugs, to anti-depressants. Individuals react differently to the various medications, and frequently it takes some time until the right substance and dosage for each person are achieved. Almost all of the medications prescribed for TS treatment do not have a specific FDA indication for the disorder.

**Is there a remission?** Many people with TS get better, not worse, as they mature. In a small minority of cases symptoms remit completely in adulthood.

**Do TS children have special educational needs?** As a group, children with TS have the same IQ range as the population at large. But problems in dealing with tics, often combined with attention deficits and other learning difficulties, may call for special education assistance. Examples of teaching strategies include: technical help such as tape recorders, typewriters or computers to assist reading and writing and access to tutoring in a resource room. Under federal law, an identification (“child with a disability”) under the other health impaired category may entitle the student to an Individual Education Plan.

**What future faces people with TS?** In general people with TS lead productive lives and can anticipate a normal life span. Despite problems of varying severity, many reach high levels of achievement and number in their ranks as surgeons, psychiatrists, teachers, executives and professional musicians and athletes.

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