

GLOSSARY OF TERMS IN TOURETTE SYNDROME

Alpha agonists	Class of sympathomimetic agents that selectively stimulate alpha adrenergic receptors
Anti-epileptic drugs	Drugs that assist in preventing absent, secondary, or partial seizures; also used for sedation, sleep and anxiety
Antipsychotics	Antipsychotic drugs help regulate the functioning of brain circuits that control thinking, mood, and perception; also known as neuroleptics
Anxiety	Anxiety symptoms in TS patients include generalised anxiety and panic feelings in public
Attention-deficit and hyperactivity disorder (ADHD)	Psychiatric condition characterised by a persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development since childhood. ADHD is the most common behavioural comorbidity in young TS patients
Autism Spectrum Disorder (ASD)	A neurodevelopmental disorder that causes social, communication, and behavioural challenges
Behavioural neurology	Clinical discipline focusing on the assessment and management of the clinical implications of behavioural symptoms caused by underlying brain pathologies
Complex motor tics	Copropaxia; echopraxia; forced touching; hitting; jumping; Palipraxia
Complex vocal tics	Barely audible muttering; coprolalia; echolalia; palilalia; random words; talking to self
Comprehensive Behavioural Intervention for Tics (CBIT)	CBIT builds on different psychoeducational elements (such as relaxation training), identifies situational factors, develops strategies to reduce the influence of these behaviours, and develops reward contingency plans
Coprolalia	Complex vocal tic consisting of involuntary swearing
Copropaxia	Complex motor tic consisting in the involuntary production of obscene gestures
Deep brain stimulation	Involves the implantation of an electrode deep within the brain of a TS patient
Deliberate self-injurious behaviours	Intentional act of causing physical injury to oneself without wanting to die
Depression	Depressive symptoms in TS patients include mood swings and feeling isolated
Echolalia	Complex vocal tic consisting in the repetition of other people's words
Echo phenomena	Automatic imitative actions
Echopraxia	Complex motor tic consisting in the imitation of other people's movements
Excoriation	Skin picking disorder
Exposure and Response Training (ERP)	ERP aims to interrupt the association between the premonitory urge and tic response in order to prevent the tic occurring. 'Exposure' is exposure to the situation. 'Response Prevention' is the making of a choice not to do the compulsive behaviour once it is triggered
Genotype	An individual's genetic makeup

Habit Reversal Training (HRT)	Behavioural therapy that is focused on awareness training and the view that tics represent prefabricated actions stored in event files, which are triggered by appropriate perceptual input. HRT seeks to replace the tic with another response and train the structure to unbind tic-specific event files
Impulsivity	Behavioural pattern characterised by uncontrolled anger and temper tantrums described as being ‘out of character’ and acted out ‘in the heat of the moment’ and characteristically followed by feelings of regret. The clinical presentation of impulsivity in TS patients is different from the symptoms of impulse control disorder reported in the context of other neurological disorders
Learning disorders	Within TS patients spelling and math’s disorders are most common learning disorders
Neurodevelopmental disorder	Group of disorders that affect the development of the nervous system, leading to abnormal brain function which may affect emotion, learning ability, self-control, and memory. The effects of neurodevelopmental disorders tend to last for a person’s lifetime.
Obsessive-compulsive disorder	Psychiatric disorder characterised by the presence of anxiety-led recurrent thoughts (obsessions), and/or repetitive behaviours (compulsions) which are time-consuming (occupying at least one hour daily on average), and/or cause significant clinical distress or functional impairment. OCD symptoms typically peak in severity later than tics, toward the end of the first decade, and are the second most common behavioural comorbidity in TS patients across the lifespan
Palilalia	Complex vocal tic consisting in the repetition of own words, often for a set number of times, or until the word sounds ‘just right’
Palipraxia	Complex motor tic consisting in the repetition of own movements, often for a set number of times, or until the movement feels ‘just right’
Pharmacotherapy	Medical treatment by means of drugs
Phenotype	Term used in genetics for the observable characteristics or traits of an individual
Premonitory urge	Widespread or localised distressing physical sensation leading to, and temporarily alleviated by, tic expression
Rage attacks	Periods of rage in TS patients that are more common at home than at school
Refractoriness	Resistance to a process or stimulus
Simple motor tics	Abdominal contractions; eye blinking; facial grimacing; mouth opening; neck stretching; shoulder shrugging
Simple vocal tics	Coughing; grunting; humming; sniffing; snorting; throat clearing
Sleep disorders	The two primary sleep disorders in TS patients are insomnia and para insomnia
The International Tourette Syndrome Deep Brain Stimulation Public Database and Registry	A publicly available website on outcomes of deep brain stimulation in patients with TS

Tic	Sudden, rapid, recurrent, nonrhythmic movement or vocalisation, usually expressed in response to a sensory urge (premonitory urge)
Tic disorders	Neurodevelopmental disorders, characterized by the transient or chronic presence of motor tics and/or vocal tics
Tic-related OCD	Subtype of OCD reported by patients with a current or past history of a tic disorder, characterised by an earlier age at onset compared to primary OCD, and a male predominance that is typical of tic disorders. In tic-related OCD there seems to be a higher frequency of aggressive, sexual, and symmetry-related obsessions, as well as of 'just right' phenomena and counting, ordering, evening-up, and touching compulsions, compared to primary OCD. Tic-related OCD is the most common behavioural comorbidity in adult TS patients
Tourette syndrome	Complex neurodevelopmental and tic disorder characterised by the chronic presence of both motor tics (at least two) and vocal tics (at least one) with onset before the age of 18
Trichotillomania	Hair pulling disorder
Yale Global Tic Severity Rating Scale	Tool used to quantify the severity of Tic symptoms in TS patients aged 6 to 17 years