

Suppressing Tics: Yes, or No?

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Finding a balance between promoting self-regulation and the natural expression of tics.

Tourette Syndrome (TS) is a neurodevelopmental disorder characterized by the presence of involuntary motor and vocal tics. However, one of the most pressing questions for families, patients, and therapists is whether tics should be suppressed, completely allowed, or addressed with a balanced approach. As research shows, the answer depends on the context and the strategies used.



What Does the Science Say About Suppressing Tics?

Compensatory Neural Reorganization in the Brain

Studies led by Stephen Jackson et al. have demonstrated that the brains of individuals with TS can adapt through a process called compensatory reorganization. This means that certain areas of the brain, such as the prefrontal cortex, develop new connections and strategies to manage tics. In this sense, voluntary suppression of tics, when done in a controlled manner, can strengthen these mechanisms and improve long-term control.

Example: A teenager who learns to control a vocal tic during a school presentation might find it easier to manage similar tics in future situations with practice.

Unconscious Suppression of Tics

It is very common for individuals with Tourette Syndrome to experience **unconscious suppression of tics**, particularly in unfamiliar settings or situations requiring focus, such as work or school. This suppression is not a conscious or voluntary act but occurs naturally in response to the environment. While it may lead to a temporary

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rebound effect upon returning to a safe space, this phenomenon does not significantly impact the overall severity of the syndrome.

Example: A student with Tourette might notice fewer tics during an important exam due to the concentration required. However, upon returning home, they may experience a temporary increase in tics, which does not indicate a worsening of their condition.

It is important to note that both conscious and unconscious suppression, when occurring in a context of trust and calmness, can positively contribute to the process of neural reorganization. This empowerment fosters long-term improvement. On the other hand, interfering with this process through external pressure or coercion does not help achieve the desired benefits over time.

Rebound Effect

On the other hand, prolonged or forced suppression of tics has been observed to increase emotional tension and may provoke a rebound effect. This phenomenon occurs when, after a period of suppression, tics intensify or increase in frequency once the individual stops trying to control them.

However, a study led by **Woods and collaborators** (2008) challenges this belief. Their research demonstrated that voluntary suppression of tics does not have long-term harmful effects or significantly increase the frequency of subsequent tics. This suggests that, under appropriate circumstances and with suitable strategies, suppression can be a valid and safe tool for managing tics.

The Emotional Impact of Coerced Suppression

Countless testimonies reveal that forcing someone with TS to consistently repress their tics can have significant emotional consequences. Such attitudes from significant individuals can increase stress, frustration, and anxiety, directly impacting emotional well-being. Moreover, coercion to suppress tics reinforces the idea that these are "unacceptable" or "shameful," which can damage the individual's self-esteem.



Low self-esteem in individuals with TS is often linked to a rejection of their condition. When tics are constantly pointed out or when there is a demand for their elimination, the person may feel misunderstood or inadequate. This makes it harder to accept TS as part of their identity and as something that does not entirely define who they are.

Accepting Tourette Syndrome as part of life means creating an environment where individuals can express their tics without fear of judgment or criticism. Acceptance fosters confidence, empowerment, and resilience, allowing people with TS to focus on developing practical tools to manage their tics instead of feeling pressured to hide them.

Interfering with natural management processes, whether conscious or unconscious, through coercion can hinder the neural reorganization that adaptively occurs in the brains of individuals with TS. Conversely, promoting management strategies based on trust and emotional support contributes to positive development and greater emotional stability over time.

Exposure and Response Prevention (ERP) Therapy

Several research have shown that **Exposure and Response Prevention (ERP) therapy** is not only effective in reducing the frequency and intensity of tics but also does not produce a rebound effect. Studies such as the one conducted by Piacentini et al. (2010) demonstrate that ERP helps individuals with TS confront the impulses that precede tics and reduce their frequency by not automatically responding to the urge.

Example: An individual with motor tics can learn, through ERP, to identify the pre-tic urge and practice resisting the impulse, gradually reducing the intensity of their tics over time.

CBIT Therapy: An Evidence-Based Solution

The Comprehensive Behavioral Intervention for Tics (CBIT) is a therapeutic strategy designed to teach individuals with TS how to effectively manage their tics without the need for constant suppression. Unlike ERP, CBIT does not promote "suppression" but instead teaches alternative responses that are

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less disruptive or more functional. Both approaches are cognitive-behavioral treatments for managing tics.

Example: A child with a tic of hitting their leg might learn to replace this movement with clenching their fists, which is less noticeable and more socially acceptable.

So, Should We Suppress Tics?

- **-Do not force suppression**: Forced suppression of tics is not only ineffective but also harmful. It increases stress and can lead to a rebound effect.
- **Allow flexibility:** It is crucial to create environments where individuals with TS feel comfortable expressing their tics without fear of judgment or criticism.
- **Promote voluntary and controlled suppression**: With the support of therapies like CBIT or ERP, individuals can learn to manage their tics in specific situations, such as social events or school activities, without compromising their emotional well-being.
- **Encourage natural suppression processes**: Both conscious and unconscious suppression, when occurring in a context of trust and calmness, contribute to empowerment and support neural reorganization, fostering long-term improvement.

Educational Guidelines for Individuals with TS

- 1. Create a safe environment: Foster understanding environments where individuals with TS feel free to express their tics without fear of judgment or ridicule.
- 2. Encourage self-regulation: Teach strategies, like those in CBIT, to manage tics voluntarily and in a controlled manner in specific situations.
- 3. Normalize tics: Explain to peers, teachers, and family members what tics are and how they are part of TS to reduce stigma.
- 4. Avoid forced suppression: Do not demand constant tic repression. Instead, help the person identify moments when they can practice voluntary control.
- 5. Teach relaxation techniques: Incorporate relaxation and breathing exercises to reduce tension associated with tics.

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6. Work with the environment: Educate teachers, friends, and family on how to support and respond appropriately to tics, avoiding comments or attitudes that could generate shame or anxiety.

References

- Jackson SR, Parkinson A, Jung J, Ryan SE, Morgan PS, Hollis C, Jackson GM. Compensatory neural reorganization in Tourette syndrome. Curr Biol. 2011 Apr 12;21(7):580-5. doi: 10.1016/j.cub.2011.02.047. PMID: 21439830; PMCID: PMC3076629.
- 2. Piacentini, J., et al. "Behavior Therapy for Children with Tourette Disorder: A Randomized Controlled Trial." JAMA, 2010. Disponible en: JAMA
- 3. Plessen, K. J., et al. "Alteraciones cerebelo-corticales y conectividad interhemisférica en el Síndrome de Tourette." Am. J. Psychiatry, 2004. Disponible en: Am. J. Psychiatry
- 4. Tourette Association of America. "Intervención Global de Comportamiento para Tics (CBIT)." Disponible en: Tourette Association
- 5. Verdellen CW, Hoogduin CA, Keijsers GP. Tic suppression in the treatment of Tourette's syndrome with exposure therapy: the rebound phenomenon reconsidered. Mov Disord. 2007 Aug 15;22(11):1601-6. doi: 10.1002/mds.21577. PMID: 17534958.
- Woods DW, Himle MB, Miltenberger RG, Carr JE, Osmon DC, Karsten AM, Jostad C, Bosch A. Durability, negative impact, and neuropsychological predictors of tic suppression in children with chronic tic disorder. J Abnorm Child Psychol. 2008 Feb;36(2):237-45. doi: 10.1007/s10802-007-9173-9. Epub 2007 Aug 24. PMID: 17717739.