

# Tourette's syndrome in famous musicians

## A síndrome de Tourette em músicos famosos

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### ABSTRACT

Tourette's syndrome (TS) is defined as a disorder characterized by multiple motor tics and at least one vocal tic that have lasted for not less than one year. It is a relatively complex neurobehavioral disorder, in which patients may present with coexistent attention deficit hyperactivity disorder, obsessive-compulsive disorder or other behavioral comorbidities. The musical genius Wolfgang Amadeus Mozart (1756-1791) and the rock star Kurt Cobain (1967-1994) may both have suffered from TS, and some contemporary musicians have had their clinical condition confirmed as TS. Our hypothetical diagnosis of TS in Mozart and Cobain is based on the presence of tics and psychiatric comorbidities. In contemporary musicians, such as Michael Wolff, Nick Van Bloss and James Durbin, TS has often only been diagnosed after a considerable delay. This delay in diagnosis and the controversies surrounding the clinical case of Mozart show how difficult a confirmatory diagnosis of this complex disease is.

**Keywords:** Tourette's syndrome, tics, movement disorder, depression.

### RESUMO

A síndrome de Tourette (TS) é definida como uma desordem caracterizada por múltiplos tiques motores e pelo menos um tique vocal com duração de ao menos um ano. TS é um distúrbio neuro-comportamental relativamente complexo, em que os pacientes teriam coexistente transtorno de déficit de atenção e hiperatividade, transtorno obsessivo-compulsivo, distúrbio de comportamento ou outras co-morbidades. Talvez sejam casos de TS o do gênio musical Wolfgang Amadeus Mozart (1756-1791) e da estrela do rock, Kurt Cobain (1967-1994). Alguns músicos contemporâneos tiveram a sua condição clínica confirmada como TS. Em conclusão, os diagnósticos hipotéticos de TS nos casos de Mozart e Cobain podem ter embasamento na possibilidade de tiques e comorbidades psiquiátricas. Observou-se um atraso de diagnóstico de TS em músicos contemporâneos (Michael Wolff, Nick Van Bloss, James Durbin). Essa situação e as controvérsias sobre a clínica no caso de Mozart mostram a dificuldade para confirmação do diagnóstico dessa complexa doença.

**Palavras-chave:** síndrome de Tourette, tiques, distúrbios do movimento, depressão.

In 1885 Gilles de la Tourette published his masterpiece *Étude sur une affection nerveuse caractérisée par de l'incoordination motrice, accompagnée d'écholalie et de coprolalie*. This work characterized in great detail nine cases of patients with tics (although this term was not used by Gilles de la Tourette), of which the first was described by Jean Marc Gaspard Itard in 1825 (the Marquise of Dampierre) and the second by Trousseau. After Gilles de la Tourette's article was published, Charcot named the disease "Gilles de la Tourette syndrome" (TS)<sup>1</sup>. TS is defined as a disorder characterized by multiple motor tics and at least one vocal tic that have lasted for not less than one year<sup>2</sup>. It is a complex neurobehavioral disorder in which patients may present with coexistent attention deficit hyperactivity disorder (ADHD), obsessive-compulsive disorder (OCD) and other behavioral comorbidities<sup>3</sup>.

The possibility of a diagnosis of TS has been investigated for many famous personalities. Examples of possible cases of TS

are the musical genius Wolfgang Amadeus Mozart (1756-1791)<sup>4</sup> and the rock star Kurt Cobain (1967-1994)<sup>5</sup>. Some contemporary musicians (Michael Wolff, Nick Van Bloss, James Durbin) have had their clinical condition confirmed as TS (Figure)<sup>6,7,8</sup>.

### Wolfgang Amadeus Mozart (1756-1791)

The possibility that Mozart may have had TS was raised at the 1983 World Congress of Psychiatry in Vienna. According to Simkin, the accumulated evidence supports the proposition that Mozart fulfilled the current criteria for TS<sup>4</sup>. Mozart's inadvertent repetitive movements of his face, hands and feet have been regarded by some as phonic and motor tics and used to support a diagnosis of TS<sup>4,9</sup>. In addition, he made excessive use of obscene words in his letters, which frequently contained anal vulgarities and words related to defecation, suggesting the presence of coprographia<sup>4</sup>. A further example of a propensity toward obscene language (coprolalia)

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Taken from the Internet. (A) Mozart; (B) Cobain; (C) Wolff; (D) Van Bloss; (E) Durbin.

**Figure.** Famous musicians with possible Tourette's syndrome.

is Mozart's canon *Lick my ass*<sup>9</sup>. Although coprolalia is a characteristic feature of TS, this language abnormality is not universally present in or specific to TS<sup>3,9</sup>. Indeed, some researchers believe that the scatological features exhibited by Mozart may merely represent what was considered an acceptable style of speech in southern Germany at that time<sup>9</sup>.

Mozart had peculiar behavior and exhibited features that strongly suggest that he suffered obsessions with objects, thoughts and repetition of certain things<sup>4,9</sup>. He also had frequent sudden mood swings from depression to elevated or expansive moods without any obvious cause, suggesting bipolar disorder. Various elements of his behavior suggest that he may have suffered from ADHD<sup>9</sup>.

### **Kurt Cobain (1967-1994)**

The year 2014 marked the twentieth anniversary of the suicide of the composer and lead singer in the Nirvana rock band, Kurt Cobain<sup>5</sup>. Since his preschool days he displayed intelligence and creativity but had considerable difficulty paying attention. He was diagnosed with ADHD and given methylphenidate to treat the condition<sup>5</sup>. He performed very badly at school and became involved with alcohol and illicit drugs from an early age<sup>5</sup>.

Cobain collected a variety of objects. He recorded his thoughts in diaries, which acted as therapy for his OCD<sup>5</sup>. His writing was creative as well as disturbing, revealing an obsession with bodily functions, and his diary entries reflect his great self-contempt, clearly showing that he always felt he was "defective", "evil" and "sick" and repeatedly had suicidal thoughts<sup>5</sup>.

As in Mozart's letters<sup>4</sup>, subjects such as excrement and sexuality were constant themes in his diary and in the lyrics of his own songs. However, the many obscenities in his music are very probably more related to the rebellious style of his musical genre than to coprographia. During his artistic career he also wrote lyrics for songs such as *Tourette* and *Lithium*. On several occasions, Cobain confirmed that some of his songs had an autobiographical element to them<sup>5</sup>.

Between the ages of nine and ten years, Cobain experienced involuntary contractions of both eyes<sup>5</sup>, and during his interviews, when he is always agitated, insecure and smoking heavily, some simple motor and vocal tics can be observed<sup>10</sup>. Unfortunately, there are no reports by physicians about the frequency of these movements. As Cobain used several drugs and medicines<sup>5</sup>, these may also have caused or exacerbated his tics, making it difficult to determine whether these movements were secondary, idiopathic or associated with possible TS<sup>3</sup>.

### **Michael Wolff (1952- ), Nick Van Bloss (1967- ), James Durbin (1989- )**

Michael Wolff is an American jazz pianist and composer who has had TS since childhood but was only diagnosed with the condition a few years ago. He is the chairman of the Tourette Syndrome Association (TSA) and co-produced *The Tic Code* (1999), a film about a single mother and her young son (a jazz piano prodigy), both of whom have TS<sup>6</sup>.

Nick Van Bloss, an English concert pianist, suddenly developed severe motor and vocal tics at the age of seven and was finally correctly diagnosed with TS when he was twenty-one<sup>7</sup>.

James Durbin won fourth place on "American Idol" in 2011. When he was nine years old, shortly after his father's death, he was diagnosed with TS and Asperger's syndrome. With time, his facial and vocal tics have become more manageable<sup>8</sup>.

### **FINAL CONSIDERATIONS**

This study has discussed the clinical conditions of some famous musicians with a view to providing a better understanding of motor and behavioral changes in TS patients. Of particular note is the difficulty involved in diagnosing TS and the long time the musicians discussed here suffered from the disease before it was correctly diagnosed and treatment was started. In the cases of Mozart and Kobain we can only hypothesize that they had TS. However, the historical data

provide substantial evidence for this diagnosis and allow the consequences of the disease in their lives to be identified.

Much of the genius and creativity of these great artists may have been related to changes in neurological functions.

We hope that this short report will be the first of further more in-depth studies on the pathophysiology and clinical presentation of TS and the relationship between this condition and gifted musicians.

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