

Gilles De La Tourette Syndrome Mimicking An Eating Disorder

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Abstract

Vomiting and retching are behaviours that are part of the clinical manifestation of several disorders. Rarely, vomiting is actually tic and, when not recognized, may mislead physicians and other caregivers to erroneously diagnose a medical or psychiatric disorder without considering a tic-disorder.

We report on an 18 year old male patient who demonstrated vomiting as main symptom. Initially, he was diagnosed with an eating disorder, bulimia nervosa purging type (DSM-IV TR). Firstly, he was not very able to suppress his vomiting, but later the vomiting became forced by putting fingers in his throat. This self-induced vomiting had a compulsive component and was performed after almost every meal. Psychiatric assessment disclosed a specific sequence of a premonitory epigastric feeling preceding the vomiting and relief after vomiting. History taking revealed that he had a childhood onset of motor tics (copropraxia which consisted of grabbing his genitalia, bilateral facial grimacing and sudden movements of the head) and phonic tics (sniffing and gargling). Furthermore, he had been treated with methylphenidate for a childhood diagnosis of Attention Deficit and Hyperactivity Disorder and suffered from obsessive-compulsive symptoms (OCS).

His vomiting was considered a tic in the course of a Tourette syndrome. His score on the Yale Global Tic Severity Scale dropped from 74 at the first assessment to a score of 50 at week 4 of treatment with risperidone 0,5 mg/day and sertraline 25 mg/day. Sedation and sexual dysfunction occurred as adverse events.

Vomiting as a tic is rare clinical manifestation, but this possibility should be considered when patients have a history of tics.

Key Words: Tourette syndrome, vomiting, tics, eating disorders, diagnosis

INTRODUCTION

Tourette syndrome (TS) was initially thought to be a rare neuropsychiatric disorder, but currently is estimated to occur in approximately 1% of school children between the ages of 6 and 7 years (Robertson 2003). The clinical hallmark is the presence of multiple motor tics and at least one phonic tic that start before adulthood and last at least one year (APA 2000, The Tourette Syndrome Classification Study Group 1993). The term 'phonic' has been suggested more appropriate to use than 'vocal' since not all abnormal sounds and voices in TS are produced by the vocal cords (Jankovic 1997). Tics can broadly be defined as (semi-) involuntary, sudden, rapid, repetitive or sequential, non-rhythmic, movements, gestures

or utterances (Singer 2000, Jankovic 2001). Premonitory sensory sensations often precede the execution of a tic (Robertson and Stern 1998). Robertson and Stern (1998) state that the temporary suppressibility of these 'sensory tics' lends them a voluntary component, which further complicates the conceptualization of a tic.

Besides tics, symptoms reflecting those of an obsessive-compulsive disorder (OCD) or an attention deficit hyperactivity disorder (ADHD), and other behavioural disorders (e.g. impulse control disorders) are often part of the clinical manifestation (Jankovic 2001, Toros et al. 2002).

Tics vary substantially in severity and duration of

manifestation and clinical presentation. The presentation of tics as common symptoms, such as a cough mimicking an asthmatic disease, often leads to misdiagnosis (Singer 2000). Excessive air swallowing can cause abdominal distention, cramping, colic, flatulence, and eructation in TS (Frye and Hait 2006).

Meyer and Rose (1986) were the first to describe retching and vomiting as a tic, but further reports are scarce (Rickards and Robertson 1997). Vomiting implies the return and expulsion from the mouth of part or all of the stomach contents, while retching consists of a forcible contraction of the stomach wall and of the diaphragm, but without relaxation of the cardiac sphincter (Rickards and Robertson 1997). Rickards and Robertson (1997) reported on 10 patients who suffered from TS and who presented vomiting during the course of their illness. Refaat et al. (2002) described another case of a patient with vomiting as part of her TS. Vomiting, when presented as a tic, is considered a phonic tic (Robertson 1998). Only two cases have been reported on the co-occurrence of TS and anorexia nervosa (Yaryura Tobias 1979, Annibali et al. 1986).

We report on a patient who was referred to our department with compulsive retching and vomiting in the absence of any somatic illness, initially suggesting the presence of bulimia nervosa. However, vomiting was later recognized as part of his TS.

CASE REPORT

An 18-year old white male patient (Body Mass Index: 22,2 kg/m²), who was a student, tentatively diagnosed with bulimia nervosa of the purging type, was referred to the Center for Eating Disorders. The main symptom in his clinical presentation was vomiting. Initially, at the age of 16 years, his ability to suppress his vomiting was limited, but later this behaviour became forced by putting one or more fingers in his throat. This behaviour was exhibited after almost every meal and occasionally it was unrelated to food intake.

History taking revealed that this vomiting was preceded by a sensory premonitory urge that consisted of an epigastric unpleasant feeling, which he described as a “gradually increasing feeling of pressure in his stomach”. He felt relieved after he had vomited and this was specifically somatic, not primarily emotional. In social circumstances, he was usually able to suppress his vomiting, but that resulted in a continuation of the unpleasant epigastric feelings. The shift to the self-inducement of his vomiting was originated by his better understanding of

the sequence of the sensations that preceded, and eventually triggered, the vomiting. This insight resulted in a compulsive drive to induce the vomiting (by putting one or more fingers in his throat) in order to reduce the inner tension that was built up. There was no specific precipitating psychological stressor for this behavior. He did not have particular concerns about his weight or body shape and he had no intention to lose weight. However initially, caregivers had interpreted this as a recurrent inappropriate compensatory behaviour to prevent weight gain in the course of an eating disorder.

He had a childhood onset (at the age of 6 years) of motor tics (copropraxia which consisted of grabbing his genitalia, bilateral facial grimacing and sudden movements of the head) and phonic tics (sniffing and gargling). The diagnosis of a tic-disorder was not made at that time. Both motor and phonic tics were observed during assessment. Furthermore, he had a childhood diagnosis of ADHD that had been treated with methylphenidate. He took methylphenidate only occasionally during his adolescence.

Associated psychiatric symptoms consisted of a fairly low mood and obsessive-compulsive symptoms. A structured screening interview (MINI-SCAN) for DSM-IV axis I pathology, showed no comorbid mood or psychotic disorders. He had obsessions about symmetry, order and neatness, and touching things. His compulsive behaviors consisted consequently of cleaning the house, touching and re-arranging things. He felt distressed when he couldn't execute them. These symptoms resulted in a degree of social impairment. The obsessive-compulsive symptoms, however, were not that severe to diagnose an obsessive-compulsive disorder (OCD). A physical examination was performed and no abnormalities were noted; furthermore, routine blood tests with regard to hematology, thyroid function, liver function, kidney function and vitamin B12 did not show any abnormality as well. Brain Magnetic Resonance Imaging did not show structural abnormal findings. There was no familial history of any tic-disorder or major psychiatric disorder.

Taken into account the nature and course of his tics, our patient was diagnosed as suffering from TS in accordance to DSM-IV-TR diagnostic criteria (APA 2000). His childhood ADHD-like behaviour and his obsessive-compulsive symptoms were considered to be associated to TS. His vomiting behaviour had the clinical characteristics of a tic and was considered to be one of the several motor tics he was demonstrating. Thus, psychiatric assessment showed that the patient did not

meet the diagnostic criteria for bulimia nervosa, since vomiting was actually not an inappropriate compensatory behaviour, nor did he show any other behaviour to loose weight such as excessive exercising or the use of laxatives. Psychologically, his self-evaluation was not disproportionately influenced by his body shape and weight. This patient had no stress about his weight or physical appearance before the onset of his vomiting behaviour and this never became an issue. Furthermore, his body weight did not fluctuate significantly.

In the very beginning of the problems, his general practitioner had treated him unsuccessfully with metoclopramide (10 mg daily dose). Before the psychiatric assessment, the patient had already been treated with cognitive behavioral therapy for more than 6 months with a focus on the obsessive-compulsive behaviour. Except for a childhood treatment with methylphenidate, the patient was never treated psychopharmacologically. However, occasionally he still took methylphenidate (10 mg). We started an atypical antipsychotic (risperidone 0,5 mg daily dose) to reduce tic severity, and a selective serotonin reuptake inhibitor (SSRI; sertraline 25 mg daily dose) to treat his obsessive-compulsive symptoms. Risperidone was chosen since the patient was not willing to take haloperidol after he was given information about the different medications. Since sedation and sexual dysfunction occurred as side-effects of respectively risperidone and sertraline, doses needed to be kept low. After 4 weeks he subjectively experienced a substantial decrease in tic-symptoms. His score on the Yale Global Tic Severity Scale (Y-GTSS) (Leckman et al 1989) dropped from 74 at the first assessment to a score of 50 at week 4. During follow-up assessment at week 4 a decrease in tic frequency and intensity was objectified. Additionally, he experienced a mild reduction of the obsessive-compulsive symptoms.

DISCUSSION

We reported on a male TS patient in whom vomiting was a tic that mimicked the compensatory behaviour of an eating disorder. This had misled caregivers to diagnose a bulimia nervosa of the purging type. Obsessive-compulsive symptoms and ADHD-like behaviors were also manifested.

In their extensive overview of the neuropsychiatric diseases that may have vomiting and retching as a symptom, Rickards and Robertson (1997) paid specific attention to this behaviour as a tic. The authors remind that the description of the phenomenology of

retching/vomiting as a tic, gives rise to some problems as normal behaviour, including vomiting, may well be accompanied by phenomena such as premonitory urges, suppressibility and relief after the execution of the behaviour. These accompanying phenomena are also presented when vomiting is manifested as a tic. Vomiting is diagnosed as a tic when the frequency of the behaviour is increased, in comparison with vomiting being a normal behaviour that can occur in everybody, and when it is presented in the context of other tics and abnormal behaviors (Rickards and Robertson 1997). The frequency of vomiting in our patient was obviously increased and several other motor and phonic tics were observed during assessment. The frequency of vomiting can be high in eating disorders as well, where it is exhibited as an inappropriate compensatory behaviour to loose weight. Vomiting in our patient was self-induced, preceded by a sensory premonitory urge and executed in a compulsive manner. Rickards and Robertson (1997) describe similar compulsive self-induced vomiting in three of the ten cases they presented.

Vomiting may also result from the administration of medication. Especially dopaminergic drugs tend to induce vomiting (Rickards and Robertson 1997), but several other psychotropic and other drugs may also have vomiting or retching as a side effect. Since our patient was virtually drug free since a long period, the nausea and vomiting he experienced could be excluded to be an influence of side-effects of drugs. He only took methylphenidate (10 mg) occasionally, but no associated exacerbation in vomiting or other tics was noted. Pharmacological treatment of tics usually includes typical antipsychotics, of which haloperidol and pimozide are approved by the FDA, or clonidine, and $\alpha 2$ -adrenergic agonist. Increasing data on the use of atypical antipsychotics in tic disorders are available (Jankovic 2001, Van Den Eynde et al. 2005), especially for risperidone (Scahill et al. 2003). Furthermore, in a recent overview on stimulants use in TS, Kurlan (2003) concluded that methylphenidate appears to be the best-tolerated stimulant compound, with tics often lessening during treatment.

Several neuropsychiatric disorders (e.g. epilepsy, migraine, tumors, etc.) and primary psychiatric disorders such as anxiety disorders (e.g. phobias, panic disorder) may have vomiting and retching as part of their clinical manifestations (Rickards and Robertson 1997). Especially in eating disorders, vomiting is often shown as a symptom.

By presenting this case we want to draw the attention

of physicians to this rather uncommon presentation of TS. The main diagnostic tool in differentiating eating disorders and TS remains a thorough clinical psychiatric assessment. Treatment implications are obvious when

vomiting is diagnosed as a tic. In adolescence general symptoms, including vomiting, may be part the clinical symptoms of TS and may mislead physicians and pediatricians.

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