

## Anxiety Belching: An Uncommon Presentation of Pure Autonomic Failure

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### ABSTRACT

We reported the case of an old woman complaining mainly belching and anxiety, but with many other symptoms. She was initially diagnosed with gastro-esophageal reflux disease (GERD) and generalized anxiety disorder (GAD). Then patient have continued to show collapses, trembles, belching, agitation, decreased salivation and severe stypsis that led her to further examinations and finally to the diagnosis of Pure Autonomic Failure. A common disease as the generalized anxiety disorder, on the one hand, can amplify and exasperate the gastric and psychic symptomatology; on the other hand, it also could result in confusing factors that provoke a delayed diagnosis. Our case highlights the importance of integrated multidisciplinary approaches to reach a close diagnosis and correct management of symptoms.

### KEYWORDS

Pure Autonomic Failure; Belching; Generalized Anxiety Disorder; Gastro-Esophageal Reflux Disease; Blood Pressure.

### INTRODUCTION

#### Case Report

C.L. is a 72 years old woman with an apprehensive and fidgety personality. During her life she has worked as teacher and she has been in retirement for about ten years. She is married and has got two daughters and a son. She doesn't smoke. The patient had a medical history of hypercholesterolemia. After the death of her father, clinical manifestations such as warm sensations all over the body, trembles, dizziness, palpitations and feeling of "needles pricking her skin" emerged. Since 1996 she showed symptoms characterized by belching and heartburn and she started having collapse episodes. Many years later, her mood tended to change easily: C.L. appeared a little shabby and neglected, abulic, without interests and demonstrated a sad and hypo-mimic facial appearance. Speech had to be encouraged and talk went slowly. Her attention was inconsistent. Since 2006, syncopes were more frequent and her blood pressure showed a tendency to post-prandial hypotension and hypertension in the late afternoon. In 2010, C.L. had atrial fibrillation and two cerebrovascular ischemic attacks, followed by deterioration of psychopathological conditions, with psychic restlessness and

ideation focused on her health. Since 2011, her salivation decreased and she started suffering from progressively more severe stypsis. Two years later, she had venous thrombosis in both legs. She arrived as inpatient in our Psychiatric Clinic complaining mainly asthenia, anxiety and belching.

### DISCUSSION

C. L. suffers from gastro-esophageal reflux disease (GERD) and has an infection from H. Pylori. GERD is a very common disease: the prevalence in the Western world ranges between 10% to 20%; the incidence can be taken as approximately 5 per every 1000 people a year [1]. Clinical manifestations such as belching and heartburn could be related to a diagnosis of GERD.

During the years, she went to visit several clinicians (general practitioner, cardiologist, gastroenterologist, neurologist and psychiatrist) who diagnosed generalized anxiety disorder (GAD) in comorbidity with a major depressive disorder. These evaluations were justified by her premorbid personality, her symptomatology and her reaction to sad life events (as her father's death). According to her somatic symptomatology (palpitations, trembles, dizziness, warm sensations, collapse)

and psychic symptoms (apprehensive personality trait, ideation focused on her loved ones and her own health), it was possible to diagnose GAD. She also had some depressive symptoms as: depressed mood for more than 6 months, an inability to experience pleasure in everyday activities, sad facial appearance, slow speech and inconsistent attention. It is important to consider the high comorbid rates of GERD and psychiatric diseases [2]. Psychological characteristics can predict the likelihood of GERD symptoms [3]. Reflux symptoms occur more frequently in patients with a diagnosed psychiatric disorder than in patients without [4].

The cerebrovascular ischemic attacks exacerbated her psychopathological conditions, complicating her diagnostic profile. Stroke and deep vein thrombosis (DVT) occurred probably because of the simultaneous presence of risk vascular factors (high blood pressure and hypercholesterolemia) [5, 6].

Symptoms such as belching, trembles, dizziness, syncope, changes in blood pressure, decreased salivation and progressively more severe stypsis, come out in favor of an autonomic impairment [7,8]. Furthermore, many of these kinds of patients show cerebrovascular lesions usually found in hypertensive subjects [9].

The patient followed different types of specific treatments, suitable for gastric disorders (esomeprazole 40 mg), blood pressure impairment (irbesartan 150 mg), anxious/depressive symptoms (paroxetine 8 drops, pregabalin 25 mg and bromazepam 10 drops as needed) and coagulation profile disease (acenocoumarol 4 mg). Nevertheless, clinical manifestations such as collapses, trembles, belching, agitation, weak salivation and severe stypsis continued.

Lately in 2012, C.L. was recommended to undergo specific exams, because of symptomatic orthostatic hypotension in suspected dysautonomia. A study suggests how emotional stress can act as a factor inducing hypotension in subjects with autonomic failure [10]. Therefore she carried out a tilting test and cardiovascular tests to evaluate the possible autonomic neuropathy. The results were: elevated levels of blood pressure in clinostatism (23.9/13.3 kPa), failure to increase in cardiac frequency during orthostatic stimulation, with reduction of blood pressure from 23.9/13.3 kPa to 17.3/10.6 kPa, which are values compatible with orthostatic hypotension without orthostatic intolerance. Thus, the diagnosis was Pure Autonomic Failure (PAF), an idiopathic form. The alpha 3 and 7 anti-ganglionic antibodies resulted negative so that an autoimmune pathogenesis could be excluded.

The specific therapy suggested was: to lift up the headboard 20 cm, to wear medium compressive capacity elastic socks in the morning, to drink some coffee when awakening and

another after lunch together with 10 drops of midodrine, to take irbesartan at 7:00 p.m. and to increase drinking water intake until 12:00 a.m [1].

## CONCLUSION

Such a common disease as GAD on the one hand amplifies and exasperates the gastric and psychic symptomatology; on the other hand it could result in confusing factors that provoke a delayed diagnosis.

It is well known that a number of neurological disorders are particularly liable to give rise to “discipline confusion” by turning up in the psychiatry clinic [12]. This should to be highlighted both for the course that brings to diagnosis and for the medical and psychotherapeutic follow-up. As previously demonstrated, emotional stress can act as a factor inducing hypotension in subjects with autonomic failure 10. This may not only help understand events, but may also help the patient: emotional stressors are hard to avoid, but knowing that the complaints are caused by defective blood pressure regulation rather than by an emotional hypersensitivity offers some reassurance.

Concluding, we can affirm that cases like these [13] require an integrated multidisciplinary approach to reach an immediate diagnosis and correct management of symptoms.

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