Case Report

Psychogenic Belching – a rare manifestation of conversion disorder

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ABSTRACT

Belching is a physiological venting of excessive gastric air. It is one of the clinical manifestations of conversion disorder. In patient with excessive belching an organic cause is seldom found and a psychogenic cause often suspected. It may be primary presenting complaint that is socially debilitating and difficult to treat. Here we present a rather rare case of Conversion Disorder presented with visceral symptom of persistent belching to get rid from the stressful situation. This case report also discusses the psychological aspects of problem. Psychological and social factors in patients play an important role in the pathogenesis of belching and the specific roles, ties with the symptoms and prognosis, prediction towards the therapy response of psychosocial factors in the pathogenesis of belching would be future research objectives.

Key Words: Conversion disorder, Psychogenic belching, Supragastric belch.

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INTRODUCTION

Belching is the act of expelling air from the stomach through the mouth. It occurs occasionally in everyone and most often are not related to a disease or pathologic condition. The medical term for belching is eructation. Uncontrollable belching is frequently benign in origin, but can be distressing in its psychosocial consequences. There are two types of belches; gastric belch and supragastric belch. Gastric belching is the escape of swallowed intragastric air that enters the oesophagus. Gastric belches occur 25 to 30 times per day and are physiological [1]. Gastric belches are involuntary and are controlled entirely by reflexes. In supragastric belches the air does not originate from the stomach but is ingested immediately before it is expelled again. Supragastric belches are not a reflex but instead are the result of human behavior. Some patients belch up to 20 times a minute [2]. A high prevalence of anxiety disorders has been described in these patients and some patients report that their symptoms increase during stressful events. Excessive belching also has been described in patients with obsessive compulsive disorder, bulimia nervosa, and encephalitis [3]. Many patients stop belching during speaking and it has been shown that distraction also reduces the frequency of belching whereas putting attention to their belching behaviour usually results in an increase in belching frequency. Supragastric belching is never observed during sleep [4].

Patients with excessive belching often complain of social isolation as a result of the excessive belching, such patient difficult to accept that it is a behaviour disorder that is causing the excessive belching [5].

Some physicians show the patient that they are able to belch intentionally themselves, to convince the patient that this is learned behavior. Belch had a variety of clinical manifestations, related to the mood changes and the environmental stress, and normally was combined with the abnormalities of psychology and personality traits. When there is a suspicion that excessive belching is secondary to a psychiatric disorder, the patient should refer for psychiatric evaluation to a psychiatrist first [6].

Belching may be a primary presenting complaints that is socially debilitating and difficult to treat. Attention has been found to modify belching frequency such that some cases may be psychogenic. Such gastrointestinal complaints sometimes may be reported in somatoform disorder but now in Diagnostic and Statistical Manual of Mental Disorders-5 (DSM-5) criteria, it is under somatic symptoms and related disorder, under subcategory of conversion disorder [7]. Clinicians need to estimate the relative contribution of psychological factors to somatic symptoms. Furthermore, repetitive belching also seems to occur as the initial presentation of some neuro-psychiatric disorders Supragastric belching is a behaviour disorder so cognitive behaviour therapy seems a reasonable alternative approach. Psychiatric counselling with cognitive behaviour therapy is the general treatment for psychogenic belching [8]. Spiegel [9] reports a case of successful treatment of belching with hypnosis.

CASE STUDY

A 12 year old male presented to the gastroenterology outpatient department with complaints of excessive belching for three months. His symptoms started 3 months before and became aggravated 10 days before his visit. The onset of belching is acute and not associated nausea, vomiting. He had any medical history and was on any medication. He was eldest of other siblings. His birth milestone and social development were unremarkable. Upper gastrointestinal endoscopy was done which showed mild gastritis. He was diagnose a having acute gastritis. He was treated with proton pump inhibitor such as omeprazole along with 5HT3 blocker for his acute gastritis problem. However after 2 weeks of treatment he didn't get significant improvement of his symptoms. The gastroenterologist was suspicious that excessive belching is secondary to a psychiatric disorder so he referred a patient to psychiatrist, for psychiatric evaluation.

In a psychiatric interview with his father revealed that the patient is stubborn, demanding and would react angrily to any criticism. They had a joint family and his grandfather is look after him along with his younger brother, with whom he had a visible sibling rivalry. He was treated discriminatingly by his parents and grandfather comparing to him other siblings.

On mental status examination he was cooperative. His speech was normal and mental function was intact. There was no evidence of depressive illness, psychosis or other organic mental disorder and no family history of psychiatric illness. The routine laboratory findings, including a complete blood cell count, serum electrolytes, and renal, liver function tests, were all within normal range. He had mild irritability and showed sadness due to discrimination from other siblings, despite he being a good student. We also observed that it stops with distraction. We have diagnosed him as a psychogenic belching. He we given clonazepam 0.25mg twice a day and escitalopram 5mg once a day, slowly increased up to 10mg once a day. We have referred him to our clinical psychologist for his behavioural therapy. He was conducted about 14 sessions of intensive behaviour therapy. By the end of 10 sessions, he started showing improvement in his belching frequencies and by the end of 12 sessions his belching completely stopped. We also conducted simultaneously counselling session along with his parents.

DISCUSSION

This case report belongs to conversion disorder, where primary symptoms of belching presents. The patient fed up due to discrimination with siblings and he want to get rid from this stressful situation. The patient reached to the illness with an attitude of indifference and showing lack of concern. We also found that he was one of the top students of his class and had histrionic personality trait. Discrimination with

siblings, sibling rivalry was also a contributing factor of his illness. The secondary gain in this case report is to get excessive attention from both the working parents and to get rid from stressful discrimination situations. Belch is a behavioural abnormality [10]. Recent research about the attention on belch frequency found that when the patient was not aware of being monitored, the belch frequency was significantly lower than that when informed of the monitoring; when the attention was distracted, the belch frequency decreased, supporting that belch was a behavioural abnormality. Some study also showed that when some patients were concentrating on doing one thing (such as completing the questionnaire), the frequency of belch could significantly reduce, some patients even needed to induce belch, and this phenomenon also supported that belch was a behavioural abnormality, suggesting that cognitive behavioural therapy might be effective towards some belch patients. The mood changes were the most frequent inductive factors changing the incidence of belch, negative events, anxiety-depression status and neurotic personality traits were more common in patients. These all tipped the psychosocial factors might play an important role in the occurrence and development of belch [11].

Psychological and social factors in patients play an important role in the pathogenesis of belch, and the specific roles, ties with the symptoms and prognosis, prediction towards the therapy response of psychosocial factors in the pathogenesis of belch would be future research objectives. The sudden onset during a stressful situation, variability in frequency as a function of physical and mental stress, and entrainment of belching frequency support the diagnosis of psychogenic belching. Psychiatric counselling with cognitive behaviour therapy is the general treatment for psychogenic belching. Benzodiazepine and anti-depressant also play an important role [12-14].

REFERENCES

1. Bredenoord AJ, Weusten BL, Sifrim D, Timmer R, Smout AJ. Aerophagia, gastric, and supragastric belching: a study using intraluminal electrical impedance monitoring. Gut 2004;53:1561–65.
2. Bredenoord AJ, Weusten BL, Timmer R, Akkermans LM, Smout AJ. Relationships between air swallowing, intragastric air, belching and gastro-oesophageal reflux. Neurogastroenterol Motil 2005;17:341–7.
3. Chitkara DK, Bredenoord AJ, Rucker MJ, Talley NJ. Aerophagia in adults: a comparison with functional dyspepsia. Aliment Pharmacol Ther 2005;22:855–8.
4. Zella SJ, Geenens DL, Horst JN. Repetitive eructation as a manifestation of obsessive-compulsive disorder. Psychosomatics 1998;39:299 –301.
5. Jones WR, Morgan JF. Eructophilia in bulimia nervosa: a clinical feature. Int J Eat Disord 2012;45:298–301.
6. Scheid R, Teich N, Schroeter ML. Aerophagia and belching after herpes simplex encephalitis. Cogn Behav Neurol 2008;21:52–4.
7. Bredenoord AJ, Weusten BL, Timmer R, Smout AJ. Psychological factors affect the frequency of belching in patients with aerophagia. Am J Gastroenterol 2006;101:2777–81.
8. Karamanolis G, Triantafyllou K, Tsiamoulos Z, Polymeros D, Kalli T, Misailidis N, Liakakos T, Ladas SD. Effect of sleep on excessive belching: a 24-hour impedance-pH study. J Clin Gastroenterol 2010;44:332–4.
9. Leibovich MA. Psychogenic vomiting.Psychotherapeutic considerations. Psychother Pschosom 1973;22:263-8.
10. Heger S. Abdominal pain syndrome as the chief symptom of an anxiety and depression. Successful treatment with inpatient psychotherapy. Psychiatr Prax 2001;28(1):45-7.
11. Hu MT, Chaudhari KR. Repetitive belching, aerophagia, and torticollis in Huntington's disease: a case report. MovDisord 1998;13:363-5.
12. D'Mello D. Aerophagia and depression: case report. J Clin Psychiatry 1983;44:387-8.
13. Chitkara DK, Bredenoord AJ, Talley NJ. Aerophagia and rumination: recognition and therapy. Curr Treat Options Gastroenterol 2006;9:305–13.
14. Sun X, Ke M, Wang Z. Clinical features and pathophysiology of belching disorders. Int J Clin Exp Med. 2015; 8(11):21906–14.

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