

Hiccups, a rare psychosomatic symptom associated with grief: A case report

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SUMMARY

It is said that when the grief process is not adequately resolved, it can be transformed into somatization and conversion reactions, which is called a "grief avoidance style response," and it is a way of expressing psychological distress with somatic symptoms. Hiccups are a common physiological condition. Although hiccup attacks usually pass spontaneously within 48 hours, if they last between 48 hours and 1 month, they are defined as persistent hiccups, and if they last for more than 1 month, they are defined as resistant hiccups. It is known that resistant hiccups can have organic, psychogenic and idiopathic causes. Among the organic causes of resistant hiccups; gastroenterologic, neurologic, hematologic diseases and medications can be said to be present. Psychological causes of hiccups are rare and should be considered after excluding organic causes. This case report discusses an adolescent who presented with persistent hiccups that began after the loss of his father.

Key words: Hiccups, grief, child, conversion disorder

INTRODUCTION

Grieving in children and adolescents is an internal process with fluctuations that can lead to significant impairment in functioning areas. It has been reported that if the grieving process is not adequately resolved, it can lead to somatization and conversion reactions, called "grief-avoidant reactions" in which psychological pain is unconsciously converted to the physical pain in order to protect oneself from the pain of loss (1). It has been known that functional neurological disorder can occur after a stressor and has various neurological symptoms include inability to stand or walk, paralysis, motor disturbances such as vomiting, coughing, hiccups, belching and gagging, sensory disturbances such as paresthesia and psychogenic non-epileptic seizures (2). Hiccups are common, physiological and rarely persistent. If they last for 48 hours-1 month, they are defined as persistent hiccups, and for more than 1 month, as resistant hiccups (3). There have been five documented cases of psychogenic hiccups in the child and adolescent age

group, but there has been no reported case of psychogenic hiccups in childhood in our country. (4). In this article, we report a case of a 13-year-old girl who presented with "persistent hiccups" during the grief period after the loss of her father. Informed consent was obtained from the mother and the patient for the publication of this report.

CASE HISTORY

A 13-year-old 8-month-old girl who has been seen in our outpatient clinic for 4 years with the diagnoses of generalised anxiety disorder and attention-deficit hyperactivity disorder (ADHD), has been treated with sertraline 50 mg/day for 2 years and has not been seen in the outpatient clinic for 6 months. In 2022, 3 weeks after the loss of her father, she presented again with the complaint of hiccups that did not go away.

In the psychiatric interviews, it was stated that repeated hiccups started 2 weeks after the loss of the father, 8-10 times a day, both the number and

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severity of the hiccup attacks gradually increased, the number, severity and duration of the attacks could vary considerably, and that they negatively affected her life. It was learned that the patient had been shy since in her childhood, had had difficulty expressing herself, became more socially withdrawn after the loss of her father and avoided talking about him. It was evident that hiccup attacks increased in severity in response to the mention of the father. This was also the case when she was informed about her father, or when she was warned or reminded of her responsibilities..

It was stated that the patient's generalised anxiety disorder symptoms decreased with psychotherapy during the outpatient clinic follow-up process that lasted for 4 years, she did not receive pharmacotherapy because her family did not agree to their child taking medication for ADHD diagnosis. Sertraline treatment was initiated because her generalised anxiety disorder symptoms persisted and she had significant performance anxiety at exams, and she benefited.. There were no known medical comorbidities and no family history of psychiatric disorders. It was noteworthy that the patient was nervous during the interviews and the hiccups seemed to increase, when the patient was asked to talk about issues that worried her, such as the loss of her father and test anxiety.

The patient was referred to pediatrics outpatient clinic for evaluation of many gastroenterological, neurological and hematological diseases such as gastric reflux, peptic ulcer, duodenal ulcer, gastritis, pancreatitis, meningitis, multiple sclerosis, central and peripheral nervous system tumors, electrolyte disorders which are frequently reported among the organic causes of resistant hiccups. Blood tests, ECG, chest radiography, abdominal USG and CT, endoscopy and brain MRI those were performed by pediatric neurology, endocrinology and gastroenterology were reported normal. After ruling out organic etiologies, chlorpromazine 25 mg was added to the existing sertraline 50 mg/day regimen for hiccups that continued and significantly increased during the evaluation period. Two weeks after starting chlorpromazine, there was no significant change in the number and severity of hiccups. Because sertraline treatment could increase dopaminergic activity and possibly cause an

increase in hiccups, sertraline treatment was discontinued and chlorpromazine 25 mg/day was kept. There was no significant change in hiccups after discontinuation of sertraline. . In this process, the case came to the interview at regular intervals and performance anxiety and grief were worked on At the 2-month follow-up interview, the number and severity of hiccups were found significantly reduced and hiccups did not occur in consecutive attacks. During the pharmacotherapy follow-up, the grief process was studied, behavioral suggestions were given, and family attitudes were discussed. After it was stated that hiccups kept decreasing, hiccups ceased on most days and did not affect daily functioning 5 months after the initiation of chlorpromazine treatment, chlorpromazine treatment was discontinued. A partial increase in hiccups was described in the period after discontinuation of treatment, but it did not exceed 4-5 times a day and did not affect her life quality.

DISCUSSION

Serotonin, dopamine, and gamma-aminobutyric acid have been reported to be involved in its pathophysiology (5). Current medical evidence suggests that persistent hiccups are organic, psychogenic or idiopathic causes . Among the organic causes of sudden onset of persistent/resistant hiccups are many gastroenterologic, neurologic, and hematologic diseases, including aerophagia, gastric reflux, peptic ulcer, duodenal ulcer, gastritis, pancreatitis, meningitis, multiple sclerosis, central and peripheral nervous system tumors, electrolyte disorders, and various medications (5). Although hiccups with psychological causes are rare, they should be considered after organic causes have been ruled out. Although there are not enough studies on the incidence and etiologic causes of persistent or intractable hiccups, a study that evaluated 95 cases ranging in age range of 68 years reported that psychiatric factors were present in 40% of all cases, 14 cases were evaluated as conversion, and 8 cases were associated with acute stressful life events (6).

When our patient presented to us, she after admission our patient was first referred to pediatrics for an organic evaluation and it was determined that no organic etiology was considered. The pediatric

gastroenterology department initiated proton pump inhibitor treatment for aerophagia because the patient had been eating very fast since she was a young child and slow eating was recommended, but no benefit in terms of hiccup attacks was observed with the treatment.

Children variously response to stress, depending on their temperament and family support. Grief has many physical and behavioral symptoms (1,7). It is known that our patient was in a depressed and distressed mood during the grief process and exhibited physical and behavioral symptoms. r, Given the patient's withdrawn temperament, her efforts to hide her emotional reactions, her reluctance to share her emotional reactions with her mother, and her avoidance of talking about her father, it can be said that she could not cope with her grief process, that she may have used the defence mechanism of supression, and that this situation may have translated into a physical symptom in the form of 'hiccups'. Based on the available data, the diagnosis of Functional neurological disorder ” was made according to DSM-5 criteria considering that hiccups started after a stressor, this behavior did not occur consciously, organic evaluations were normal, and functionality was affected. Considering that our patient did not have excessive effort in his thoughts and behaviour in relation to the hiccup symptom and did not have anxiety about this condition defined as la bella indifference, the current picture was evaluated in favour of Functional neurological symptom disorder and the diagnosis of somatic symptom disorder was excluded in the differential diagnosis. Aerophagia was ruled out because hiccups started after a stressor, there was no complaint of hiccups before the stressor, and the complaint of hiccups did not decrease after taking measures to slow down eating. In our case, our findings suggested that hiccups were psychogenic in origin.

Although psychogenic hiccups in children and adolescents are reported to be rare in the literature, 5 case reports have been observed (4). When the common features of the 4 case reports, whose ages ranged between 11 and 13 years, were examined, it was found that the hiccup attacks were usually intermittent and the young person often did not attend school as a secondary gain, there was an

improvement in parental relationships, the hiccups in all cases ended rapidly, including two cases on the day of the interview, and no medical treatment was used except in one case (8). In another 16-year-old case report, the patient was a girl with significant test anxiety, hiccups began and increased during the anxious period, and response was obtained with haloperidol (9).. Similarities between our case and the literature include avoidance of the father-related grief process as a secondary gain, significant test anxiety and increased hiccups during the anxious period. In addition, it was thought that the long-term persistence of hiccups might be related to the grief process and that addressing the grief process with pharmacotherapy would be effective in reducing hiccups.

Case reports of hiccups with aripiprazole, risperidone, and sertraline have been reported in the literature (10-12). Although there are currently no studies with definitive results regarding hiccups caused by selective serotonin reuptake inhibitors (SSRIs), it has been reported that various psychotropic agents that affect dopaminergic activity may be associated with hiccups by affecting the brain and spinal cord. Case reports have suggested that sertraline may cause hiccups because it is a more potent inhibitor of dopamine reuptake than other SSRIs (10-12). In our case, it was thought that the current hiccup picture was not related to sertraline because hiccups did not decrease after sertraline treatment for anxiety disorder was discontinued. Chlorpromazine is FDA-approved for resistant hiccups (13). (It was the first choice in treating hiccups. Working of grieving in interviews prevented recurrence after discontinuing chlorpromazine.

According to the psychodynamic approach, conversion symptoms are symptoms that help resolve unconscious conflicts and are explained as symbolizations of the conflict. Conversion symptoms function as a means of coping with the stressful situation or help the person to organize the environment (14). Given the psychological factors such as temperamental characteristics, the presence of anxiety disorder diagnosis and the association with an acute stressful life event such as bereavement, it was suggested that hiccups were a conversion reaction in our case.

In conclusion, with the current medical data, it should be noted that resistant hiccups, although rare, may have a psychogenic origin and may transform into somatisation and reactions if the grief process is not properly resolved, and physical symptoms may occur.

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