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A Case of Astasia-Abasia as Early Onset Conversion Disorder Triggered by Psychosocial Stress Factors

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SUMMARY

Conversion disorder is defined as the loss or change of motor, sensory, and autonomic nervous system-related functions that cannot be explained completely with organic causes. The etiology of the disease may be explained by psychoanalytic theory, learning theory, sociocultural factors, and some traumatic life events besides genetic and neurobiological factors. The onset is usually between late childhood and early adulthood. The disorder occurs after a high rate of psychosocial stressors and the symptoms can vary. While astasia, as one of the possible complaints in conversion disorder, is defined as not being able to stand due to loss of motor power or sensory loss; abasia is identified as patients having no apparent motor problem but not being able to walk properly. Both conditions can be of organic as well as the psychogenic origin. In this paper, the clinical signs of a seven-year-old boy who was admitted to emergency service of Mersin University Faculty of Medicine with the complaints of astasia and abasia but was found to have conversion disorder is presented. The results of the medical examinations and the possible psychosocial stress factors behind these symptoms, as well as the treatment process of the case, were shared. With this report, we is aimed to draw attention to the importance of early diagnosis of the disorder, the necessity of an interdisciplinary approach in the treatment process, and the handling of psychosocial factors leading to somatic symptoms.

Keywords: Child, conversion disorder, treatment

INTRODUCTION

Conversion disorder is defined as the loss or change of motor, sensory, and autonomic nervous system functions that cannot be explained by organic reasons. The disease onset is usually in the period between late childhood and early adulthood, and the incidence in males and females is 2-10/1 (Ali et al. 2015). Although seen rarely in children and adolescents in western countries, significant numbers of patients consulting child and adolescent psychiatry outpatient clinics in our country have been diagnosed with the disorder (Akdemir and Unal 2006). Conversion disorder symptoms are considered to be caused mostly by psychosocial stressors, the common complaints comprising motor disorders such as the inability to stand or astasia, the inability to walk or abasia, stroke and paralysis, sensory disorders such as paresthesia with numbness or tingling, dysphagia, retching, symptoms related to the autonomic nervous system such as anosmia (loss of smell) and non-epileptic seizures (Leary 2003). The underlying causes of astasia with inability to stand due to loss of motor power or sensory loss, and abasia with severe difficulty in walking while maintaining mobility can be organic as well as psychogenic (Vercueil 2010).

This report discusses the case of a 7-years old boy admitted to the emergency service of Mersin University Faculty of Medicine with complaints of astasia and abasia and diagnosed with conversion disorder after complete investigation of the

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clinical symptoms and the underlying probable psychosocial stress factors together with the treatment process.

CASE

The male patient of 7 years and three months of age, who had woke up 2 nights previously with leg pain, cramps and tremor that spread from the right to the left limb and progressed to prevent walking was brought to the hospital emergency service and transferred to the pediatrics clinic. In the absence of a history of similar symptoms, the patient's condition was investigated on an inpatient basis and when an underlying organic pathology could not be determined he was referred to the psychiatry outpatient clinic.

The patient was anxious during his psychiatric examination, not wanting his leg to be touched and even when calmed down after getting distracted, he remained apprehensive of any attempt to touch his leg. He appeared to be motivated and concentrating on the interview. His thought contents were pervaded with the imminent exams and anxiety over failure, but he did not describe hallucinations or delusions. Interviewing his parents on his demographics, developmental history and present condition, it was learned that he was the older child with a 1.5-year old male sibling both born to a 38-years old high school graduate mother working in a logistics firm. He did not have a parental history of psychiatric diagnoses. However, his mother had experienced fainting attacks under intense stress during her adolescence which were not feigned, suggesting conversion disorder for which her parents had not consulted a specialist. Also, the sister of the patient's father had displayed frequent fainting attacks during adolescence which was diagnosed as conversion disorder by a psychiatrist.

Risky conditions such as systemic diseases, medication use, threats of miscarriage or physical violence had not been experienced during the maternal pregnancy. The delivery was in the 40th week by caesarean section, when the premature newborn did not cry and had to be ventilated in incubator for respiratory distress. The patient's medical history included febrile convulsions at 2.5 years of age, tonsillectomy and two ear tube surgeries. There had not been developmental delays in walking, speaking and toilet training. He had not experienced adjustment problems when starting elementary school. He was already in the second grade with good peer relationships but poor academic performance. One week before the psychiatric consultation he had been diagnosed with attention deficit and hyperactivity disorder (ADHD) and started on methylphenidate (27 mg/day) treatment. The mother reported that the patient was very mobile at school, stubbornly refused to sit down for homework, had serious concerns and somatic complaints such as headaches and vomiting before each exam and wanted reassurances against being rebuked for anly failure. He was also intensely jealous of his brother and had been demanding continual attention of his mother who complained of having difficulty caring for the very active toddler and the patient.

It was ascertained that the respiratory, cardiology and gasrointestinal investigations on the patient by the pediatrics clinic had not resulted in any pathology. Also the laboratory results on his hemogram, sedimentation rate, biochemistry tests, the levels of C-reactive protein (CRP), myoglobin, and electrolytes were in the normal range. Pelvic radiography, spinal and cerebral magnetic resonance (MRI) also did not show pathological signs. With all these results in mind and the exclusion of all possible organic pathologies such as Guillain Barre syndrome (GBS), multiple sclerosis (MS), transverse myelitis, pelvic or spinal tumors, the incompatibility of astasia and abasia symptoms with the results of neurological examination and the fluctuation and exacerbation of symptoms at different times and in association with recent psychological stress factors suggested that the appropriate diagnosis was conversion disorder and ADHD according to the DSM-5 diagnostic criteria. The patient was also found to have an anxious character.

Methylphenidate treatment was discontinued primarily to exclude possible side effects during the treatment process. It was considered to seek points of view and support from the physical medicine and orthopedics clinics for using the physical exercises to improve standing and walking complaints as part of behavioral practices in the treatment process, on the degree of difficulty and the duration of the exercises to be realized and whether the possible pains appearing during these exercises would harm the patient. However, since conversion disorder has a good prognosis after early diagnosis and psychiatric treatment (Pehlivantürk and Unal 2002), it was decided to evaluate this approach after psychotherapeutic interviews directed to the patient and the parents. During the entire work on the case, apart from the first interview, separate interviews were conducted with the patient and the parents on the 2nd day followed by a further interview made with the parents on the 3rd day. The treatment stage progressed with psychoeducation of the patient and of the parents and using behavioral interventions and the inclinations to inculcation while focusing on the items in the agenda related to the condition of the patient.

In the interview held with the patient on the 2nd day, he was explained, in a context compatible with his developmental level and by using examples different from those specific to the case, the relationship between compelling emotional situations and

motor movement problems and how symptoms of conversion could occur. When asked, *"Every child experiences some anxiety before taking exams. But you know, when these concerns are a little too much, sometimes some children may get nauseous, have headaches, some may not move their hands or even talk. How do you think this has happened to you lately?"*, the response received was *"My legs hurt, went numb and I couldn't walk."* Thereupon, it was attempted to support the patient's belief in recovery and his feeling of autonomy on his behavior by telling that he did not have any reasons to worry about his existing complaints, that it was possible to re-control the process of walking and standing, how he could overcome what he had said he could not do when alone and all else that he could do on his own. Considering that the dominant stress factor associated with the complaints of the patient was the anxiety of failing the upcoming exam, he was told *"I have heard that your exams will start soon. How do you usually feel at times like this?"*. His response was: *"I'm scared. Because my mom wants me to study all the time and get high marks on exams. She says bad words to me when I don't do what she wants and she yells at me when I get a bad mark."* It was observed that the patient was reticent to comment particularly on this subject, his anxiety and resistance increased and he remained silent after each sentence. In the gaps that arose during the interview on the subject, the patient was encouraged to express verbally his feelings by accepting his statements and thoughts on the judgmental and punitive attitudes of the mother, which he had difficulty to express.

The interviews with the parents during the patient's treatment advanced with psychoeducation and behavioral interventions. The first interview, aiming to make the parents aware of the patient's condition, covered the definition of conversion, the causal process, the relationship of the symptoms of conversion with emotional difficulties specific to the case and the likelihood of improvement if the parent cooperated. Moreover, the concept of secondary gains, how secondary gains could serve the patient to continue with feigning sickness, the parenting attitudes that could reinforce these secondary gains and measures such as patience and neutral stance in facing the patient's complaints and supporting the patient for walking by himself and controlling his behaviors were discussed. The second interview included recommendations on attitudes and behaviors in relation to the agenda items specific to the case and comprising forming realistic expectations about the academic level of the patient, tolerating failure, avoiding punitive attitudes and focusing on strengths, expressing unconditional attention and affection to both children in a balanced way and sharing the parental responsibilities of the children.

The patient, brought to the first interview in a wheelchair, arrived at the outpatient clinic on the day after the last parental session without any astasia and abasia symptoms and complaints of pain or numbness in his legs. The sudden as against gradual development of these changes was noteworthy. The family did not continue with the treatment despite being informed that continuing the sessions would be necessary for preventing symptomatic relapse, when written consent and oral consent were obtained from the legal guardian of the patient for this planned case report.

DISCUSSION

Individuals with conversion disorder are 14 times more likely to have this disorder in the first-degree female family members as compared to others in the general population (Marshall et al. 2015). In the case discussed here, having a paternal aunt diagnosed with conversion disorder compounded with the frequent fainting attacks experienced by the mother during adolescence, which appeared to be associated with conversion disorder rather than factitious disorder or malingering, suggest that genetic susceptibility may have an etiological role. Nevertheless, it was emphasized that psychosocial stress factors in everyday life, psychodynamic processes associated with the parent, and some parental attitudes that reinforce disease behavior can play an important role in the emergence and continuation of complaints related to the disease especially in children and adolescents (Yalug et al. 2007). Considering the main purpose of the study, the psychosocial stress factors that are thought to be associated with the complaints specific to the discussed case and the style of addressing parental attitudes in the treatment process are included in this section,

A close look at the history taken from the parents indicates the presence of an excessively protective attitude especially of the mother, during the developmental stage of the patient such that situations that could have led to intense health-related anxiety experienced in this stage might have augmented these protective attitudes of the mother, as the primary caregiver of the patient. With the coincidence of the birth of the patient's sibling with the start of schooling, decrease in the intense caring behavior of the mother up to that age at different conditions of sickness and the appearance of pressure and punitive attitudes for academic performance were observed. This change of maternal attitude is thought to have intensified the patient's feelings of jealousy towards his younger sibling. What is most noteworthy from the researcher's point of view is the emergence of the patient's conversion symptoms in the form of astasia and abasia at the time when the younger sibling

had just started to stand and walk. In the context of the psychoanalytic theory, this situation is reminiscent of the regression mechanism and/or an unconsciously made call for help in the form of *"Take more care of me!"* or *"Don't leave me!"* (Kaplan 2016). Indeed, conversion disorder is defined as a form of external expression of spiritual needs not met or feelings found difficult to externalize (Kozlowska 2007). It was argued on the basis of the psychoanalytical theory that the anxiety caused by unconscious impulses and internal conflicts gets converted by finding a response in the defense mechanism in the form of bodily complaints. Getting relieved of intense anxiety experienced by the appearance of conversion complaints is considered to be a primary gain for the patient (Öztürk 2001). In the discussed case, getting relieved of the abandonment anxiety caused by the decreased attention of the mother with the birth of a sibling and the anxiety arising from the dysfunctional attitudes of the mother on exam success by means of the conversion complaints can be a interpreted as the primary gain for the patient. When evaluated psychoanalytically, it should be noted that the anxious character observed in the patient may have augmented the sensitivity to the cited psychosocial stressors.

Individuals with conversion disorder may also enjoy attentive, understanding and tolerant attitudes from others in their family and close social environment because of their illness, which may help free them from some responsibilities. Such conditions occurring outside the awareness of the patient are better characterized as psychological rewards that are defined as secondary gains (Öztürk 2001). It has been argued that during the behavioral treatment of children with conversion disorder, prevention of the attitudes reinforcing the secondary gains, seen especially in parents, and supporting the healthy responses in children and parents are effective measures (Zincir et al. 2012). In this context, it was thought that the appearance of the recent conversion complaints in the case discussed here might serve the secondary gains of regaining the former intense attention of the mother that waned with the birth of a sibling and escaping the exposure to the punitive attitudes of the mother after a possible failure in the approaching exams. Therefore, during the interviews with the parents, behavioral interventions were made for the prevention of secondary gains in the considered circumstances, assuming that these interventions would also be effective on the anxiety factors related to the primary gains. It has also been emphasized that making use of the susceptibility to suggestion through behavioral techniques aiming at preventing secondary gains in the disappearance of acute complaints during the treatment process of these patients is an important healing factor (Moene et al. 2003). This technique was benefited from by adopting attitudes directed to supporting the development of control over the patient's complaints and by giving psychoeducation to the parents for dsplaying the same attitudes at home.

Necessitating prolonged and unnecessary examinations by misdiagnosing conversion disorder as an organic disease was argued against and emphasis was put on the importance of interdisciplinary cooperation in the treatment process (Pehlivanturk and Unal 2000). In the case discussed here, not having considered a diagnosis of conversion disorder to begin with did require extensive examinations for organic pathology. However, the patient was referred to psychiatry in a short time enabling the clarification of the case and starting the treatment process without delay. An important question to be asked about the treatment process of the patient is *"whether the conversion complaints of the patient would have disappeared if the patient and the parents had not been interviewed and the pediatrics routine were continued for only a short-term acquisition of secondary gains"*. Although making the necessary analysis is not easy, not delaying the diagnosis, working, albeit for a short period, by psychotherapeutic interviews on the psychological factors underlying the patients complaints, compliance of the patient and the parents with the treatment process, absence of behavioral disorder or abuse in the patient's history are believed to have been effective as a whole on the rapid disappearance of the conversion symptoms and the return of the patient to his normal routine of living. Here, another important point to consider is that although continuation of the treatment process with the patient and the parents for a longer term was thought to be the right approach, termination of the process by the family after the rapid disappearance of the patient's symptoms can increase the possibility of relapse as it has been known that in a quarter of these patients the condition recurs during periods of stressful life events (Kaplan et al. 1994).

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