Treatment of a severe conversion disorder in a 10-year-old boy: a case study and overview

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Conversion disorder (CD) in children remains a major challenge both in pediatric and mental health clinics and is still a prevalent psychiatric disorder in developing countries. The authors describe a 10-year-old boy with the complaints of inability to walk, speak or eat, excessive drooling, urinary and fecal incontinence, disturbance from light and sound, and expression of needs only by eye movements. The patient diagnosed with CD was followed by the Department of Child and Adolescent Psychiatry with play therapy, individual psychotherapy and family therapy. At the end of three months, the patient was discharged. This is one of the most challenging cases of CD in children. The most important aim of the treatment is to understand the need for conversion symptoms and to constitute a healthy psychological environment for the child rather than to remove the physical symptoms.

Key words: conversion disorder, child, treatment.

Conversion disorder (CD) in children remains a major challenge both in pediatric and mental health clinics. CD is still a prevalent psychiatric disorder in developing countries[1], and children with CD are usually exposed to unnecessary medical investigations or pharmacological treatments[2].

Since the symptoms of CD are mostly physical, children with conversion symptoms are usually first presented to pediatricians or primary healthcare providers. The role of the pediatrician in recognizing and managing CD in children is crucial for a successful treatment[3]. In a four-year follow-up study at our clinic, it was determined that 85% of the children and adolescents with CD had completely recovered and 5% had improved. However, mood and/or anxiety disorders are encountered at a considerable rate in these patients even after recovery from conversion symptoms[4]. In a recent long- term follow-up study, the prognosis of CD in children was found to be more serious with respect to psychiatric morbidity in adulthood. Jans et al.[5] suggested that treatment strategies have to consider that initial recovery may not be stable over time. The literature on the treatment of CD in children mostly consists of case reports with different therapeutic intervention models, and controlled clinical trials of these interventions are lacking[6].

The aim of this paper was to discuss the treatment of CD in children through a case study of a 10-year- old boy with a severe and chronic CD.

Case Report

The patient was a 10-year-old boy and 5th grader. He lived in a small town with his family and had a five-year-old sister. His complaints included inability to walk, speak or eat, dysphagia, excessive drooling, urinary and fecal incontinence, disturbance from light and sound, and expression of needs only by eye movements.

The complaints of the patient started a year before with the opening of the schools. Occasionally, he had headaches that responded to analgesics. Through the end of the first semester, the headaches intensified and he began to complain of additional abdominal pain. At the local State Hospital, the patient was prescribed intramuscular antibiotics and

analgesics, yet the complaints persisted. The family then applied to another State Hospital in a nearby city. He was hospitalized twice for short periods for a thorough examination, but no specific cause for headaches or abdominal pain was found. When he started to have symptoms of imbalance and inability to walk, the patient was referred to the Child Neurology Unit of a University Hospital, where he was hospitalized for evaluation. Detailed investigations (magnetic resonance imaging [MRI], electroencephalography [EEG], and lumbar puncture [LP]) were carried out, and no organic disorder was found. The patient was consulted to child psychiatry, and with the diagnosis of CD, fluoxetine 10 mg/day was started. The symptoms worsened during the 12-day stay. Other symptoms like inability to speak, dysphagia, enuresis, disturbance from light and sound, and drooling were added to the clinical picture. The patient was discharged to be followed as an outpatient. After his discharge, his clinical state worsened, and his family took him to another University Hospital Psychiatry Clinic, where he was hospitalized for two months with the diagnosis of CD. He was followed with individual and family psychiatric interviews and pharmacotherapy. He was prescribed haloperidol but when extrapyramidal symptoms (EPS) were observed, haloperidol was switched to risperidone and alprazolam. A nasogastric tube was used for feeding. After one month of hospitalization, with pediatric and anesthesiology consultation, electroconvulsive therapy (ECT) was planned, and 13 sessions of ECT were given. The patient, with whom no symptomatic progress was achieved, was discharged to be followed as an outpatient. During this period, the family did not use risperidone.

Two months after his discharge, the patient was re-admitted to Hacettepe University Children's Hospital emergency room. The patient was immobile, was unable to sit up or walk, and could not move his hands or legs. He had a nasogastric tube, was diapered, had secretions from his mouth, and had a cover over his eyes because of light disturbance. He was not talking, but moaning continuously, and shrieking and spitting all over when someone tried to take the cover off his eyes. Despite his inability to speak, he gave the impression that he could understand what was said to him. The communication was limited; he answered some of the questions by nodding or by blinking. He had been in this clinical state for 5-6 months. His mother reported that this condition changed while asleep at night, in that he could turn effortlessly and move his hands and legs.

The patient is the first child of a traditional family of lower socioeconomic level. The father is 36 years old and has a primary education. He used to earn his living by working on farms and in construction, but is currently unemployed. The mother is a 34-year-old housewife with a primary education. At the beginning of their marriage, the father did not want to have a child. Since he did not want his child to have a miserable life, he wanted his wife to have an abortion, but she refused. The child became very precious for him. Before his son's birth, he sold some gold and bought a bicycle and tried to provide everything for his child so that he would not be deprived. He was a tolerant father who expressed his love explicitly. Compared to the father, the mother was more distant. She would bathe her son, put his clothes on and would not want him to go to school running. She would watch him on his way to school to make sure that he stayed on the sidewalk. She sometimes would not let the boy out to play because she thought he might get cold. According to the mother, the father's attitude spoiled the boy. Any wishes and needs of the patient had been met from the onset of the illness. Although the mother did not think it was appropriate to comply with every wish of the patient, she reluctantly tolerated him because of the pressure from the father and the grandfather, to the point of even letting him hit her.

His speech, language and motor development were within normal limits. Systemic and neurological examinations were completely normal. Just prior to the illness, during the summer vacation and with his grandfather's persistence, the patient began to attend a religious course (where the children usually were supervised in an extremely authoritarian manner). The course was held in a nearly deserted area, 30 minutes away on foot. Every day when the child returned from the course, he would complain to his mother that he did not want to go and was scared of getting hurt.

Nevertheless, he continued attending for a month. During that period, he had nightmares in which he fell into a hole while running away from the course. When the school opened, some children who were 2-3 years older had threatened to take his toys. Around the same time, one of his friends fell on top of him from a tree that he was climbing. In his last days at school, he had stopped going out for the recesses and stayed in the classroom to do his homework. Apart from these incidents, no other precipitating factors, like any evidence of sexual abuse, was found in the evaluation. The patient was a congenial, hard-working and fearful child. He was his father's "special" child, and expectations for him were high. He was good in school. His self-confidence was low, but he had no behavioral problems.

Clinical Follow-up: In the first week of the hospitalization, the patient was observed accompanied by his mother, and it was determined that there was no underlying organic disorder that caused the symptoms. Given the investigations at the previous hospitals, no further investigation was required. He moaned and shrieked continuously because of his disturbance from light and television. It was observed that his mother tried to meet his every wish in order to settle him down. The child and his parents were informed about the nature of the disorder. The physical symptoms were never discussed, apart from informing about the illness at the beginning of the interviews.

In the second week of the hospitalization, it was decided to follow him without company, and that the family should visit him only once each week. The treatment plan consisted of daily interviews (supportive psychotherapy and play therapy) with the patient and weekly interviews with the family. Olanzapine 5 mg/day and fluoxetine 20 mg/day were started. Aggression and negativistic attitude of the patient were prominent. His disruptive behaviors like spitting on others when he became angry were restricted.

As he was clinically in a deep regression (infant stage), sensory-motor play (the play of the concrete, self-centered, predominantly biological infant) was planned first. As eye movements following some objects were detected, objects were played with or manipulated by the therapist. The objects or toys that gained his attention were placed in his hands. It was observed that he was primarily touching the objects. Gradually, he began to handle them and finally to play with them.

The patient, with no specific diagnosis, was consulted with a physical therapist. Although there was no atrophy due to immobilization, it is decided to keep the patient in the passive exercise program five days a week. He started to move his arms by the third week and began to spend his days in a supported half-sitting position. By the beginning of the third month, faradization was planned as an addition to his treatment with the suggestion that he would be able to walk afterwards. Significant improvement in the leg movements was observed, and he started to speak between his teeth, after which he began to express himself. He said that he was very strong, could do whatever he wanted, and that he would beat up anyone trying to stop him. He also indicated that he became sick because he was a respectful, adaptive and abiding child.

In the third month, a deal was made with the child about removing his nasogastric tube and taking liquid food. Thereafter, his nasogastric tube was intermittently removed until his discharge. In the last period, he began to use his legs actively, and started to throw himself off the bed and crawl and creep. The progressive mobilization of the patient was associated with prominent behavioral problems such as difficulties in obeying the rules and testing of the boundaries. Because of his harmful risky behaviors, he was discharged to be followed as an outpatient with olanzapine 5 mg/day and fluoxetine 40 mg/day. On the day of discharge, he voluntarily removed his nasogastric tube and urinated in a bottle, and it was reported that about a week later he suddenly walked out and played with his friends. The patient continued to be followed as an outpatient with regard to his behavioral problems and parental attitudes and he recovered completely. He has been symptom-free for the last four years.

Discussion

This is one of the most challenging cases of CD in children. A relatively poor prognosis could have been expected for this case in view of the polysymptomatic presentation, severity

and chronicity of the symptoms, his poor capacity to gain insight, cooperation problems of both the child and family, the absence of an easily identifiable stressor, and the comorbid behavioral problems. It is conceivable that the severity of the precipitating factors did not correlate with the severity of the disorder. No evidence of sexual abuse was found in the evaluation. However, a physical threat or fear of being harmed can be a very severe trauma for an immature child who has poor coping skills. In this case, the patient was in a state of deep regression. The symptoms served the child's need to be taken care of like a baby and to keep his mother close in order to feel safe. With appropriate therapeutic intervention, complete recovery was accomplished. The therapeutic intervention helped the child to maintain emotional stability and cope with internal and external stress. While he gained ego strength, he recovered from conversion symptoms as if re-growing.

An integrated treatment approach is crucial for a successful treatment in CD. A solution-oriented treatment plan that seeks to understand the underlying etiology for the conversion symptoms or the body language should be made. The first step of the treatment is to eliminate any uncertainty or suspicion concerning the CD diagnosis. The treatment will fail if there are any doubts of organic disorder. Therefore, cooperation between pediatrics and child psychiatry is essential in the diagnosis and treatment of CD. The responsibility of the diagnosis of CD should be shared. It is inappropriate to carry out further investigations after the diagnosis, even is the family insists. These repetitive and unnecessary investigations for any organic etiology may increase the anxiety and thus cause prolongation in the duration of the illness. It is important that the pediatrician first explains the preliminary diagnosis to the patient and the family. Paying attention to the hypotheses and concerns of the family makes it easier for the family to accept the situation. The patient and the family must be assured that their relationship with the pediatrician will continue. Both in western and developing countries, physicians have difficulties in recognizing the psychiatric disorders in primary health services. Despite the fact that CD is a prevalent psychiatric disorder in Turkey, it is either misdiagnosed or treated with improper methods in the emergency services. In a study from Turkey, the misdiagnosis rate, which was higher among children under 12 and children from rural areas, was reported to be 37%. Similarly, unnecessary medication was used in 31% of these children[7].

In societies in which the psychiatric disorders are not approved or where there are fears of stigmatization, people may prefer a physical illness to a psychiatric illness[2,8]. In Turkish society, it is observed that there are no negative thoughts, attitude or stigmatization of laypeople towards those with CD. However, the ignorance of the primary health physicians was found to be influential on the treatment of CD[9]. This finding suggests that training on CD may increase the quality of the approach of physicians to these patients. Some physicians may experience anger with the thought that these patients are escaping from their responsibilities, acting deliberately, or at least modifying (changing the pattern/severity of) the symptoms. For a successful treatment, both pediatricians and psychiatrists should address their negative feelings toward CD.

Assuring the child and the family that they are not dealing with life-threatening physical illnesses and explaining the relationship between the physical symptoms and the psychological distress represent the most important steps in the treatment. Even making the diagnosis and showing the relationship between the disorder and psychological factors may be healing.

During the informing process, the objectives should be: (a) explaining the nature of the complaints, (b) mentioning the possible relationship between the underlying, precipitating or maintaining factors, (c) eliminating the false beliefs and unrealistic concerns, and (d) reducing the anxiety.

It was believed that psychoanalytically oriented psychotherapy is the best therapy for CD. Yet, classical psychoanalysis could not accomplish a favorable outcome in every hysterical patient. It is reported that supportive, cognitive-behavioral or play therapies are helpful in the treatment of CD in children. Cognitive-behavioral therapy is the best established treatment for conversion disorder[10,11]. Individual psychotherapy helps children gain insight regarding their

unconscious conflicts and understand how they influence the continuance of these symptoms. Many children with CD are diffident children who lack confidence and have difficulties in expressing their feelings. The purpose of the individual psychotherapy is to increase the self-esteem and self-confidence of the children and adolescents; to help the child identify, verbalize, and communicate negative feelings; to teach them to express their feelings through healthier methods rather that physical expression; and to accomplish an improvement in the child's problem-solving and coping skills.

For a successful treatment, an integrated treatment approach that includes the family and the school is required. Environmental conditions and secondary gains should be identified, restored or eliminated: Do the symptoms serve as a balance to the family system? Do the interactions in the family or attitudes support the conversion symptoms? Are there any specific roles or responsibilities that are either forced upon or voluntarily accepted by the patient? The place of the child in the family and his/her role in the conflicts of the family should be evaluated carefully. This evaluation should also include understanding the function(s) of the symptoms concerning the homeostasis of the family as a system. Developing healthier relationship patterns and restoring the communication within the family should also be aimed.

Children usually have psychiatric problems along with the somatic symptoms. It is necessary to identify other underlying or accompanying disorders such as affective disorders, anxiety disorders, post-traumatic stress disorder, and attention-deficit hyperactivity disorder, and to add specific drug treatments. Preliminary but not yet conclusive evidence exists for antidepressants. Citalopram is reported to be a promising treatment for functional recurrent abdominal pain in children[12]. The patient should be hospitalized if there are no improvements in the outpatient setting. In some cases, it is necessary to recede from the stressful or pathological home environment. It is ineffective to expect any recovery when highly stressful life conditions exist. Although some improvement in the symptoms may be achieved in these cases, this progress is generally temporary.

Many patients benefit from physical therapy, which makes it easier for them to gradually return to their routine activities. In the presence of motor symptoms, physiotherapy and exercises may be used as a part of treatment. Children with CD frequently are sensitive to physical sensations and may misinterpret them. Training patients in terms of physiological mechanisms helps them to distinguish real illness symptoms from normal or anxiety-based physical sensations. A positive outcome was reported with an intensive and well-coordinated physical rehabilitation program[13].

In conclusion, even though CD has been seen less frequently in recent years, it is still prevalent in developing countries, and thus more research is needed on the etiology, comorbid disorders and treatment alternatives of this disorder. Controlled clinical trials of the various therapeutic interventions are needed. The most important aim of the treatment is to understand the need for conversion symptoms and to constitute a healthy psychological environment for the child rather than to remove the physical symptoms. A solution-oriented multidisciplinary treatment is required to handle CD in children. The answer of this patient to the question "what do you think makes a patient get better?" summarizes the basic principles of the CD treatment: Patience, Trust, Placing limits, Willingness.

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