

CASE REPORT

Somatic delusion concurrent with AIDS neurosis in a girl with diabetes mellitus

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Abstract

A 15 years-old girl with diabetes mellitus after a major stress expressed that a group of viruses invaded her gastrointestinal tract and a clump adherent damaged these organs (acute stress disorder and then nihilistic delusion). No evidence of HIV infection was found, but she believed that she was carrier for viruses (aids neurosis). She was resistant and sensitive to pharmacotherapy and psychotherapy, but response to Electroconvulsive therapy ECT (six sessions) was favorable. Stress management helped her physicians to control her blood sugar.

Key words: Diabetes mellitus, Somatic delusion, Acute stress disorder

INTRODUCTION

The prevalence of diabetes is estimated to be 3–4%.^{1,2} The prevalence of diabetes and Impaired Glucose Tolerance in patients with schizophrenia and related psychotic disorders is 16. 0% and 30. 9% (higher than general population).^{3,4} When a person suffers from this fact that she/he is definitely HIV positive despite negative tests, this phenomenon is named "AIDS neurosis". Non-specific complaints and phobic states are presented in this condition.⁵ HIV infection is associated with negative HIV-related health and psychological outcomes.⁶ 60 - 80% of healthy individuals experience somatic symptoms every week and 10-20% of individuals are worried about this disease.⁷ Abnormalities of glucose metabolism are more common in those suffering from a psychiatric disorder.⁸ Delusional disorder is a rare psychotic disorder with prevalence of 0. 03%.⁹

In this survey, we present a stressful girl with diabetes mellitus and intellectual borderline IQ that progressed to delusional disorder and AIDS neurosis, challenging with blood sugar control. On the other hand, this question remains that which can diabetes cause delusional disorder?

CASE REPORT

A 15 year- old girl with diabetes mellitus (DM) and intellectual functioning referred to a psychiatrist. She expressed that a group of viruses invaded her stomach and intestines and a clump adherent damaged these organs (nihilistic delusion) and she was depressed and anxious. She sensed viruses under her skin in her abdominal region (tactile hallucination). No evidence of HIV infection was found but she believed that she is a carrier of viruses. She saw a dog during her sleep (recurrent nightmares).

In perinatal period, her mother had a stress due to her father's car accident (her mother was pregnant at that time and heard about her husband's car accident and she started to walk to hospital in 1 hour).

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The patient also had a delay in her behavioural development.

In her childhood, she had masturbatory behaviors, but her mother hadn't a fair approach to this problem. Her mother just advised her to avoid this work with the words meaning that if she still continues this behavior, she will suffer from AIDS disease. Her aunt and her grandmother died of cancer several years ago. Then her mother believed that she is facing to malignancy too (hypochondriasis). In her adolescence, she used to study and search about HIV/AIDS and the ways of its transmission in her books.

One day when she was asleep, a fearful dog entered her home unpredictably (traumatic situation). She was very frightened (disaster). Her diagnosis was Acute Stress Disorder (ASD). Then she believed that she is a patient with AIDS. Agitation, perseveration, poverty of thought, low and mono-tone speech and suggestibility were observed during interview. Mild hirsutism was detected and eye contact was poor. She complained of severe otalgia, but no problem was detected by the examiner. She expressed multiple somatic complaints.

She was selected for a research study about stem cell therapy 2 years ago but unfortunately it wasn't successful. She was worried and hopeless about it.

Academic problem was clear and IQ test according to Raven method was 83. EEG was normal. Lab tests were normal except for blood sugar that was very variable in range of 45-462. HIV tests were negative. Her family history for organic illnesses was negative. Her mother was anxious and over-protective (helicopter/ over-parenting).

Thirty two units regular insulin and 20 units NPH Insulin were prescribed for control of diabetes. But blood glucose control was problematic, especially after the onset of recent episode of illness.

We admitted her and started risperidone 1mg daily and then 2 mg daily plus chlorthalidopoxide 5 mg BID. After 8 days, she didn't feel better, therefore we started trifluoprazine 1mg daily and titrated dose till 3 mg daily. In the other hand, we tapered risperidone and discontinued it and imipramine 10 mg was started. We were not able to increase the drug dosage, because of appearance of drug side effects. After third session of ECT, she was better, but some of her complaints remained.

Response to pharmacotherapy was poor and 6 sessions ECT was considered, Tab. imipramine 10 mg BID and Tab. Depakine 200 mg/ day were prescribed.

She was discharged after 3 weeks without a rigid belief about AIDS. Anxiety was decreased and she felt better.

Three and 5 weeks after discharge, she was visited and anxiety was decreased and delusion wasn't obvious. Because of the symptoms of drug-induced parkinsonism, dose of trifluoprazine was decreased and aripiprazole 5mg/daily was started due to her weight gain. After 6th weeks, she was better than before and family distress was decreased. Her blood sugar was completely controlled as well.

DISCUSSION

Accompaniment of psychiatric disorder with diabetes is important because its effects on outcome of treatment.

The patient with diabetes mellitus is more likely to suffer from such psychiatric disorders as mood disorders, anxiety disorders, non-organic and organic psychoses, and substance abuse disorders in comparison to non-diabetic patients (10).

Before the beginning of treatment, blood sugar level was very variable and response to insulin was very poor that is probably due to catecholamine release following emotional disturbance, fear and anxiety. Anxiety can play a major role for starting a psychiatric problem. The first, delusions were fixed, but after ECT they were changed to partial delusion. Reassurance and empathy were effective. It is possible that maternal stress is a trigger for metabolic diseases and psychiatric disorders such as hypochondriasis and somatic delusion.

Guilt was a defense mechanism against masturbatory behavior and then it triggered some serious psychiatric problems.

As the role of stress, we list some of stressors in this special patient: perinatal stress, economic problems, frequent displacement of living place. Long-term organic illness, facing with a dog, change of school, fear of suffering from a serious infectious disease, and fear of separation from her mother.

Similar symptoms are observed in delusions of parasitosis that is a rare psychiatric disorder in which patients believed that they are infested with some type of parasites. They are resistant to psychiatric medications and interventions.¹¹⁻¹² In our study, the patient believed that she is infected with HIV(AIDS Neurosis).

A differential diagnosis of this disease is hypochondriasis. Hypochondriasis is recognized as a preoccupation with fears of having a serious disease based on symptoms of misinterpretation of bodily sensations.¹³ In hypochondriasis, there is fear of death, but our patient didn't significantly expressed it. We found that stressors can lead to additive effect. Then these effects may produce anxiety or adjustment disorder, then a somatoform disorder like hypochondriasis, then change in a delusional disorder (like somatic type). After beginning of treatment,

these complaints resolved with an opposite process. By controlling the stress and disorder, blood sugar became normal. As my personal experience and consultation with endocrinologists, stress is a very important obstacle against control of blood sugar and reversely, its management improves blood sugar regulation.

CONCLUSION

Clinicians should pay attention to the early symptoms of psychiatric disorders in diabetic patients and consider regular glucose monitoring in those who have risk factors for developing psychiatric disorders. In long-term and chronic disease, the parents and physicians should monitor psychiatric problems.

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