Acute psychotic disorder manifested with somatic symptoms: a case report

Ūminis psichozinis sutrikimas, debiutavęs somatiniais simptomais: klinikinis atvejis

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SUMMARY

Introduction. There are cases when it is difficult to recognise the onset of psychosis in adolescents due to its atypical manifestation. There had been case reports that manifested with symptoms of eating disorders as the first symptoms of psychosis. Alternatively, there had been cases of psychosis and eating disorders in adolescents presented as separate disorders. During psychosis episodes patients may develop auditory hallucinations and delusional interpretations about food that may subsequently lead to food refusal. In the case of a 17 year old female patient presented below the psychotic symptoms were supplemented with significant electrolyte abnormalities. The patient had low electrolyte concentration that had continued for seven days, even after the treatment had been assigned. This was the main obstacle in a differential diagnostics of somatic disorders.

Case report. In a case of a 17 year old female, the first episode of psychosis manifested itself through the patient's refusal to eat or drink. She was admitted to the hospital with significant dehydration, hypokalemia, hyponatremia and hypocalcemia. According to the patient's parents, two weeks prior to her hospitalization she had refused to go to school, was sluggish, and spoke very little. Due to her inadequate behaviour (she was conscious but could not keep up the conversation and was not available for meaningful verbal contact) the patient was consulted by a children and adolescent psychiatrist and consequently the acute and transient psychotic disorder was diagnosed. Electrolyte abnormalities were corrected with a prescription of potassium chloride and calcium. Simultaneously she was treated with antipsychotic medications: risperidone 6 milligrams per day, later changed to olanzapine 10 milligrams per day. The positive dinamic was very slow: the persecutory delusions, the auditory hallucinations, a low volition and a pure meaningful verbal contact stay for a while. A lower concentration of electrolytes (K, Ca, Mg) had been reported for two weeks even after the treatment had been assigned. After the course of treatment the patient began to communicate, eat and drink water, use the shower regularly and without being reminded about it. However, such symptoms as low volition as well as monotonous emotions and the desire to be isolated persisted.

Conclusions. Acute and transient psychotic disorders in female's adulthood may be first triggered in children and adolescents by acute onset of delusional syndrome manifested with somatic symptoms. Throughout the analysis of this case it is important to consider both physical and mental disorders, particularly in young females with atypical somatic symptoms or eating disorders. A follow up on this patient is highly recommended due to the fact that children with psychotic symptoms have an increased risk for schizophrenia onset in adolescence or adulthood.

Key words: psychosis, adolescent, somatic symptoms, manifestation

SANTRAUKA

Įvadas. Pirmas psichozės epizodas dažniausiai pasireiškia paauglystėje arba jauname amžiuje. Neretai paauglių amžiuje psichozės pradžia būna netipinė, kas apsunkina ankstyvą diagnostiką. Aprašomi atvejai, kai psichozė debiutuoja valgymo sutrikimais – tiek kaip atskiru susirgimu, tiek kaip atsisakymu valgyti dėl imperatyvių klausos haliucinacijų ar kliedesinės simptomatikos. Mūsų aprašytame atvejyje psichozės debiuto metu pirminiame klinikiniame vaizde stebėtas ryškus elektrolitų disbalansas, kuris ilgą laiką sunkiai koregavosi, kas apsunkino diagnostiką, kėlė įtarimus dėl psichozės, kaip galimo somatinio susirgimo ar sindromo.

Atvejo aprašymas. 17 metų pacientės sutrikimas debiutavo atsisakymu valgyti bei gerti. Į ligoninę atvyko su ryškios eksikozės požymiais, elektrolitų disbalansu (hipokalemija, hiponatremija, hipokalcemija). Iš pacientės tėvų sužinota, kad 2 savaites iki patekimo į stacionarą pacientė nebelankė mokyklos, labai mažai kalbėjo. Dėl įtariamo psichikos sutrikimo (pacientė sąmoninga, tačiau prasmingam verbaliniam kontaktui neprieinama, nes nekalba) konsultuota vaikų psichiatro ir perkelta į psichiatrijos kliniką: būklė vertinta kaip ūminis polimorfinis psichozinis sutrikimas. Taikytas tiek somatinės būklės (elektrolitų disbalanso korekcija), tiek psichinės būklės (antipsichozinis) gydymas – pradėtas rispiridonu, titruojant iki 6 mg per parą. Nesant klinikinio efekto (išliekant psichozinei simptomatikai, apsunkintam prasmingam verbaliniam kontaktui), gydymas keistas į olanzapiną iki 10 mg per parą. Gydymo eigoje stebėta vangi teigiama dinamika: ilgą laiką išliko apatija, persekiojimo kliedesiai, klausos haliucinacijos, apsunkintas prasmingas verbalinis kontaktas dėl pacientės gynybiškumo. Nepaisant skiriamo gydymo, somatinė būklė kelias savaites taip pat išliko nestabili, stebėti elektrolitų (K, Ca, Mg) svyravimai. Palaipsniui normalizavosi somatinė būklė, redukavosi kliedesinė simptomatika, pacientė tapo kiek aktyvesnė bendravime ir kasdieninėje veikloje, tačiau išliko hipobulija, emocijų blankumas, polinkis atsiriboti.

Išvados. Ūminis polimorfinis psichozinis sutrikimas dažniausiai pasireiškia jauno amžiaus moterims, bet šiuo atveju pradžia buvo staigi ir netipinė, manifestavo reikšmingais somatiniais simptomais. Todėl jauno amžiaus pacientėms nustačius netipinius somatinius simptomus ar valgymo sutrikimo simptomus, rekomenduotina detaliai vertinti psichinę būseną dėl galimos psichozinės simptomatikos. Gydant jauno amžiaus pacientes svarbu atkreipti dėmesį tiek į somatinių, tiek į psichikos simptomų dinamiką, bei sekti ligos eigą dėl šizofrenijos sutrikimo rizikos.

Raktiniai žodžiai: psichozė, paauglystė, somatiniai simptomai, pasireiškimas.

INTRODUCTION

An acute and transient psychotic disorder (ATPD) has a greater frequency of affecting females between early and middle adulthood. Females usually have a gender predicted favourable symptomatic and good longitudinal outcome. ATPD with schizophrenic symptoms is usually diagnosed at a younger age [1, 2]. The appearance of the first psychotic episode during adolescence may have different clinical and individual correlations in comparison to adult-onset cases and might be characterized by diagnostic stability limitation, hospitalization, further treatment necessity and a high percentage of unfavourable functional outcomes. [3, 4].

In order to make an accurate diagnosis of a psychotic disorder in children and adolescents, a complete history and physical examination as well as psychiatric evaluation, are required. A careful and systematic assessment of a child's current and previous psychiatric symptoms, psychosocial functioning and family psychiatric history is a vital source of information when making a diagnosis [5]. Psychiatric history should take into consideration the presenting symptomatology, the longitudinal timeline of symptom development, and associated features and/or confounding factors (e.g., mood disorders, developmental problems, and substance abuse). It is important to obtain a longitudinal understanding of a child's illness. Certain core aspects of psychotic disorders may be missed if a clinician conducts only a cross-sectional checklist of symptoms [6]. It is known that adolescents with psychotic symptoms have an increased risk for development of schizophrenia in early adulthood [7].

CASE PRESENTATION

A 17 year old female with a first episode of psychosis manifested through refusing to eat or drink. She was admitted to the hospital due to her dehydration and electrolyte abnormalities (hypokalemia, hyponatremia, hypocalcemia). According to the patient's parents, through the last two weeks prior to her hospitalisation she had refused to go to school, had been sluggish, and had spoken very little. Due to her inadequate behaviour (she had been conscious but could not keep up with the conversation and had not been available for a meaningful verbal contact) the patient was consulted by a children and adolescence psychiatrist and subsequently diagnosed with acute psychotic disorder.

It is known that in her last year at school, the patient had avoided any interaction with the other teenagers and became withdrawn and anxious if asked questions during the lessons. She had not shared her feelings with her parents either. In the last three months prior to her admission to the hospital the parents had noticed that the patient would forget to eat or drink. In the last two weeks her behaviour became inadequate: she had refused going to school as she felt being followed, as well as talked about. One week prior to her admission she had been sluggish, had difficulty in speaking, and could not keep up with a conversation. Two days prior to her admission to the hospital she had refused to drink water completely. The patient was admitted to an Intensive Care Unit of the Lithuanian University of Health Sciences Hospital, Kaunas Clinics due to exicosis and signs of hypovolemia. The patient had no complains at the moment of admission in terms of her mental state. According to her parents, the patient had had weakness, light-headedness, insomnia, a fear of sleeping alone and had felt withdrawn. She had been conscious of her surroundings, understood speech but had been unable to answer questions coherently. The patient had recently become silent, sluggish and had had slower movements. She had been unwilling to interact with others as well as eat; she had refused to drink water for the past two days.

The psychiatric evaluation had revealed that the patient had not been available for meaningful verbal contact and had to think for a while before answering questions. She had responded with meaningless sounds after a longer pause or with single words like "I do not know", "probably", "yes", "no", but not always related to the issue, or in connection to a question. Her speech had been quiet. She looked at doctors suspiciously and trying to avoid any eye contact. During the interview the patient had tensed up, her gaze focused on a single detail and at times she smiled inadequately without any reason. Her thinking had been slow and lacked consistency. The psychiatrist's suspicions of the auditory hallucinations had been confirmed by the patient – she had explained that she had heard voices inside as she pointed at her chest as the place where she heard them.

The physical examination had revealed the signs of severe dehydration. The patient had had dry lips and tongue, cold and sweaty hands, an acetone odour of her breath. The neurological examination had revealed no gross abnormalities.

Despite the normal findings in routine examinations the electrolyte levels appeared abnormal as hypokalemia, hyponatremia, and hypocalcemia had been observed. A lower concentration of electrolytes had persisted for seven days even with assigned treatment.

During the hospital treatment the dynamics of potassium (K) concentration had changed from 3,3 mmol/l to 4,2 mmol/l (normal range 3,6–5,3 mmol/l); natrium (Na) – from 133 mmol/l to 141 mmol/l (normal range 135–145mmol/l); magnium (Mg) – from 0,62 mmol/l to 0,95 mmol/l (normal range 0.8–1.0 mmol); ionazed calcium (Ca) – from 0,97 mmol/l to 1,03 mmol/l (normal range 0,99–1,13 mmol/l). The patient had been consulted by a neurologist, a paediatrician, an endocrinologist and a nephrologist in order to differentiate between various concurrent diagnoses. However these consultations had not revealed any somatic disorders.

The course of illness was unusual in terms of it being manifested with somatic symptoms. The patient had been treated for severe dehydration for twenty four hours in the Intensive Care Unit. After the consultation by psychiatrist the patient was transferred to a Children and Adolescents Psychiatry Department where she had been treated for 50 days. The patient had had pronounced somatic symptoms (dehydration, weakness); therefore, antipsychotic treatment had been assigned with caution. In this case, the typical antipsychotic (haloperidol) had not been prescribed due to a high risk of side effects associated with it. It is known that the atypical antipsychotic medication is more suitable for young people since it has had fewer symptomatic adverse effects reported in the short term [8]. Risperidone was prescribed for the treatment of psychotic symptoms and gradually increased up to 6 milligrams per day. The delusional interpretations and negative symptoms had persisted; therefore, the medication had been changed to other atypical antipsychotic Olanzapine and gradually increased up to 10 milligrams per day. A lower concentration of electrolytes

had been reported for two weeks even after the treatment had been assigned. The electrolytes levels had been restored with the prescription 750 milligrams of potassium chloride per day and 500 milligrams of calcium per day. The concentration of electrolytes had been followed regularly in addition to the other tests and consultations. After the patient's somatic state had been stabilised and antipsychotic treatment assigned, she started to communicate a little bit more with the other children at the hospital as well as with her parents. The patient's everyday functioning had improved as she began to eat and drink and use a shower without being reminded about it. However, the patient's low volition as well as monotonous emotions and the desire to be isolated had remained.

DISCUSSION

The unusual manifestation of psychosis in the case presented above has caused complications during the differential diagnostic procedures and a choice of treatment as well as its further adjustments. In order to differentiate between the mental disorder and a somatic illness, several tests and consultations had been performed. A head computed tomography had allowed to dismiss the possibility of brain changes such as brain tumors or cysts. Due to persistent electrolytes abnormalities, such congenital electrolytes metabolic disorders as Gitelman syndrome (GS) had been considered. GS also referred to as familial hypokalemia-hypomagnesemia, is characterized by hypokalemic metabolic alkalosis in combination with significant hypomagnesemia and a low urinary calcium excretion. Patients often suffer from tetany during periods of fever or upon losing of Mg due to vomiting or diarrhea. Paresthesias occur frequently, especially in the facial area. Some patients experience severe fatigue interfering with daily activities, while others never complain of tiredness. Electrolyte abnormalities are known to be the cause of mental or psychological alterations. In this case, the patient's electrolytes had been closely monitored. After a course of treatment, the symptoms of psychosis episode had still remained. The acute psychosis episodes have been documented as the first symptoms of endocrine disorders [9]. Therefore, some additional examinations – PTH and cortisol that appeared within the normal range – have been performed by an endocrinologist. During the patient's stay at the hospital, all alternative diagnoses except for acute psychosis had been eliminated.

It is discussed widely in the literature that both psychotic and eating disorders may occur simultaneously. This may cause difficulties in diagnosing and assigning the right treatment as it happened in the described case. The literature on this topic is based on multiple detailed case studies; however, there is no proven consistency in the co-occurrence of the two conditions: eating disorders and psychosis [10]. Korkeila et al. presented the case of a young woman in her mid-twenties who had previously been treated for anorexia nervosa, developed delusions about being followed and exhibited eccentric public behaviour [10]. Furthermore, Lai and Tan reported the case of a 13 years old female with early onset schizophrenia and later developed anorexic symptoms and binge eating. A year prior to the onset of her psychotic illness she had become very concerned with her body weight and started dieting [11]. It is known for psychosis to be followed by symptoms of eating disorders as a result of auditory hallucinations or other delusional interpretations. The other possibility is also discussed in the literature where the eating disorders themselves are being followed by psychosis episodes. The perusal of the literature has led to several hypotheses about the comorbidity of the patient's psychotic episode and eating disturbances. The eating disorders and psychoses are entirely separate disorders that can, by chance, occur in the same person. An eating disorder is an early sign (prodrome) of an impending psychosis or, conversely, psychotic symptoms can herald the beginning of an eating disorder [11]. To the best of our knowledge, this is the first presented case with unusual manifestation (hypokalemia, hyponatremia and hypocalcemia) of acute and transient psychotic disorder.

CONCLUSION

First episodes of psychosis in children and adolescents usually manifest atypically. Acute and transient psychotic disorders may be characterised by acute first onset as well as delusional syndrome as described in this case manifested, in addition, with somatic symptoms. This case has demonstrated that it is essential to advert to both physical and mental disorders in cases of young patients. A follow up on this patient is highly recommended as children with psychotic symptoms have an increased risk for schizophrenia onset in adolescence or adulthood.

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