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Mental Retardation with A Comorbid Bipolar Affective Disorder and its Treatment with Lithium: A Case Report

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ABSTRACT

Mental retardation with a comorbid bipolar affective disorder and its treatment with lithium: a case report

Mental Retardation (MR) affects nearly 1-3% of the population and often goes with comorbid psychiatric disorders. According to the literature, bipolar affective disorders are among the least studied psychiatric disorders in MR. Focusing more on MR than other psychiatric disorders and for mentally retarded persons, difficulty in explaining their signs and symptoms might interfere with considering affective disorders in this population. In this case report, we present a male patient who has MR with comorbid bipolar affective disorder with manic attack, and his treatment process.

Key words: Mental retardation, bipolar affective disorder, lithium

ÖZET

Zeka geriliği ile birlikte görülen iki uçlu duygudurum bozukluğu ve lityum ile sağaltımı: Olgu sunumu

Zeka geriliği toplumun yaklaşık %1-3'ünü etkilemekte ve sıklıkla komorbid bir psikiyatrik bozuklukla beraber seyretmektedir. Zeka geriliğine eşlik eden psikiyatrik bozukluklar arasında literatürde en az değinilenlerinden biri duygudurum bozukluklarıdır. Zeka geriliği olan bireylerin psikiyatrik bozuklukların belirti ve bulgularını tanımlamalarındaki zorluklar ve klinisyenlerin daha çok zeka geriliğine odaklanmaları, duygudurum bozukluklarının gözönünde bulundurulmasını engelliyor olabilir. Bu olgu sunumunda, zeka geriliğine eşlik eden iki uçlu duygudurum bozukluğu manik dönem tanısıyla izlenen erkek hasta ve tedavi süreci ele alınmaktadır.

Anahtar kelimeler: Zeka geriliği, iki uçlu duygudurum bozukluğu, lityum

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INTRODUCTION

Mental retardation is described as diminished perception capacity characterized by impairment of basic adaptive and social skills and its prevalence is 1-3% in general population (1). It was shown that psychiatric disorders are seen at 30-70% of people with mental retardation (2). However, comorbidity of bipolar disorder with mental retardation has not been adequately investigated and evaluated in the literature. One reason for this might have been seeing symptoms and signs of the clinical condition as consequences of lack of intellectual capacity (3). This was defined by Reiss et al. (4) as diagnostic overshadowing. Another reason may be inadequate verbal skills causing inadequate expression of feelings and thoughts. For these reasons, current diagnostic systems defining psychiatric disorders by phenomenological approach may be inadequate.

Because an important portion of manic episode criteria in diagnostic systems rely on verbal expression, it may be quite difficult to clarify bipolar disorder diagnosis in individuals with mental retardation (1). Various diagnostic schemes were developed to diagnose bipolar disorder in these patients due to lack of verbal skills mentioned above which make it difficult (5,6).

In this article a case who has been followed-up by "psychotic disorder accompanying mental retardation" diagnosis and his diagnosis was changed to "bipolar disorder accompanying mental retardation" after our assessment and full recovery in symptoms and signs was observed after lithium treatment was discussed. Informed consent for this presentation was taken from the family of the case before writing the manuscript.

CASE

Single, male patient who was 40 years old was the third of four siblings. He has never gone to school, never worked, could not talk, is aware of his family and was living with them. He was taken to emergency department of our hospital due to insomnia, restlessness, hostility, shouting like barking, collecting papers after tearing them out, undressing among people, frequent masturbation, frequently going to loo/bathroom. After his initial evaluation at emergency department, he was admitted to our inpatient clinic with diagnosis of conduct disorder accompanying mental retardation. In his psychiatric examination, it was observed that his self-care was diminished, psychomotor activity was increased, not responded to verbal stimuli, not cooperated with the interviewer and had one syllable verbal repetitions like "pa, pa" continuously.

According to history taken from his family, he seemed to be mentally normal until 2 years old and he started not speaking and continuously crying at that time. Except for the periods of above mentioned complaints, patient can eat independently, can manage his self-care such as toileting, cutting his nails and bathing and can carry out simple commands in routine daily life. He started being lost mainly in springtime when he was 22 years old. When they found him, his family learned that he was wandering at locations far away from his home. His family said that these symptoms do not continue without interruption, he behaved differently from time to time, especially in springtime he had complaints such as shouting, insomnia, agility, going to bathroom continuously, collecting papers and shouting "money, money" and restlessness. He had been taken to various psychiatrists, they told that he is mentally retarded and was prescribed various psychopharmacological agents.

Patient was first admitted to our hospital in 2006 and moderate level of mental retardation was found (IQ: 45-50) in intelligence test. Clozapine treatment was started for psychotic disorder accompanying mental retardation but his treatment was stopped due to neutropenia. His first hospital admission was in August 2008. His symptoms at that time were insomnia, restlessness and shouting and electro-convulsive therapy (ECT) was administered. He was discharged with diagnosis of atypical psychosis and mental retardation with the treatment of 2 mg/day risperidone and 2 mg/day biperidene. His family reported that his general condition was well after discharge and had no symptoms for nearly one year with this treatment.

Patient was admitted to our hospital second time in October 2009 with similar symptoms and four sessions of ECT were administered but stopped due to prolonged epileptic seizure after ECT. Patient was consulted to neurology department and diffuse bioelectrical slowing was detected in EEG but no antiepileptic treatment was recommended. In brain magnetic resonance imaging, signal increase was detected in frontal and temporal lobes but acute ischemic lesion was not found in diffusion magnetic resonance imaging. His treatment (olanzapine 20 mg/day) was stopped due to development of ileus. He was discharged in December 2009 with partial remission and his treatment was rearranged as quetiapine 800 mg/day, carbamazepine 800 mg/day and sulpride 50 mg/day.

In January 2010, he was readmitted to our hospital with similar symptoms such as insomnia, continuous shouting, voices like barking, continuously collecting papers and tearing them off and started treatment with carbamazepine 1200 mg/day and discharged with partial remission 15 days later. He was admitted to our emergency department with same complaints a week later and hospitalized. He was evaluated as treatment-resistant psychotic disorder and his treatment was rearranged as quetiapine 750 mg/day, carbamazepine 200 mg/day, sulpride 600 mg/day, chlorpromazine 300 mg/day and discharged with partial remission in February 2010. He was readmitted to our clinic 20 days later. He was thought to have additional anxiety and his treatment was rearranged as quetiapine 700 mg/day, carbamazepine 200 mg/day, clonazepam 2 mg/day, fluoxetine 20 mg/day, olanzapine 20 mg/day, biperidene 4 mg/day and discharged with partial remission. He was readmitted to our hospital three days after discharge and his treatment was rearranged as amisulpride 1200 mg/day, biperidene 4 mg/day, carbamazepine 400 mg/day, quetiapine 400 mg/day

and discharged with partial remission. He was readmitted to our hospital three days after discharge with similar symptoms and his treatment was rearranged as sulpride 800 mg/day, biperidene 4 mg/day, carbamazepine 400 mg/day, chlorpromazine 600 mg/day, propranolol 40 mg/day and zuclopentixol decanoate 200 mg/every 15 days and discharged due to decrease of his symptoms.

When patient was readmitted to our clinic five days after his discharge through emergency department, his previous diagnoses and treatments were reevaluated in detail and detailed interviews were done with family members about his disease course. He was reassessed and diagnosed as manic episode of bipolar affective disorder with mental retardation. Lithium 900 mg/day was added to his treatment and his other medications were gradually tapered down. Patient dramatically responded to lithium treatment within 24 hours and his psychomotor activity decreased, sleep duration increased, stopped shouting and his undressing and masturbation terminated in the following days. His family said that they have not seen him in such good condition in the last five months. His symptoms at time of admission totally relieved and he was discharged with lithium 900 mg/day.

In his monthly visits after discharge, no manic or depressive attacks were observed and his family did not complain about any further symptoms. His treatment is being continued with lithium 1200 mg/day.

DISCUSSION

Clinicians may have difficulties when evaluating diagnostic criteria about bipolar affective disorder due to lack of verbal expression at individuals with mental retardation. Well-known manic episode symptoms such as irritability, variable mood, increased motor activity and decreased need for sleep are frequently observed in the studies but grandiosity and increased self-esteem are observed less frequently (7-9). Difficulties to detect manic episode criteria at DSM-IV-TR such as elevated mood, grandiosity, incoherence and distractibility which are mainly based on verbal expression in people with mental retardation lead to reevaluation of diagnostic criteria (8,10). Manic episode criteria could not be fully evaluated as well due to lack of speech in our case and symptoms such as predominantly excited mood, irritability, decrease in amount of sleep, increase in inappropriate behaviors compared to previous condition, increase in amount of speech, decrease in functionality, exhibit his sexual organ among people and excessive masturbation were observed which suggest manic attack. In addition to these, periodical characteristics of his symptoms and periods without any symptoms according to detailed history taken from his family were among factors suggesting bipolar affective disorder. In conclusion, clinical picture of our case has similar clinical characteristics with bipolar disorder cases with mental retardation in the literature (8,10). Current diagnostic classification systems do not contain phenomenological presentations of Axis I disorders accompanying mental retardation and related diagnostic criteria. For this reason, definition problems of affective disorders in people with mental retardation in diagnostic classification systems are still continuing. Due to these insufficiencies, it is not clear whether this case should be defined as "bipolar disorder type 1" or "bipolar disorder, unspecified" in diagnostic definition. Diagnostically-focused studies in this field may eliminate these shortcomings.

There was no history of bipolar disorder in the family history of our case. In the study of Hiroshi et al. (10), no difference was found about the family history between individuals with mental retardation with or without bipolar disorder. However, when number of cases is taken into consideration, studies with higher number of subjects are needed to evaluate familial burden.

In case reports and double-blind follow-up studies in the literature on cases with bipolar disorder and mental retardation, substantial improvements were observed by lithium as mood stabilizer (11-13). Although case reports about efficacy of valproic acid are few, in the follow-up study of Kastner et al. (14), efficacy of valproic acid on affective symptoms of individuals with mental retardation was shown. Limited data are available about efficacy of carbamazepine in the literature (15) and in our case, carbamazepine was administered for conduct disorder but no improvement

was observed. Psychomotor activity of our case decreased 24 hours after lithium treatment started and symptoms rapidly ceased in the following days. Rapid decrease in manic symptoms after rapid loading of lithium has been mentioned in the literature but efficacy of this option needs to be confirmed (16). It was also reported that ECT is effective in the affective alterations of patients with mental retardation (17). In this case, ECT was effective which is consistent with the literature but treatment had to be stopped due to prolonged seizure.

In conclusion, mental retardation causes alterations in presentation of several psychiatric disorders and may be compelling for clinicians. In this paper, we tried to show through a case that behavioral changes in people with mental retardation may not always be due to conduct or psychotic disorders, affective disorders should also be considered in similar conditions. Due to difficulties mentioned above, there is need for further studies in this field.

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