

COEXISTING BIPOLAR DISORDER AND COGNITIVE IMPAIRMENT – CASE REPORT

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SUMMARY

Objective: The objective of our study was to show how the cognitive impairment caused by bipolar disorder influenced on the patient's life quality.

Results: Our case report shows that there exists the dependence between the deterioration of the cognitive impairment caused by the bipolar disorder and increasing level of the patient's quality of life.

Conclusion: The result of our investigation is consistent with a number of other studies connected with cognitive functioning in patient with bipolar disease.

Key words: bipolar disorder – cognitive impairment

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INTRODUCTION

The course of bipolar disorder may be affected by many different factors (Piwowarczyk & Krysta 2009). Bipolar disorder can coexist with diseases such as anxiety disorder, obsessive-compulsing disorders, substance abuse etc.; one of them is organic disorder due to brain injury. People who are affected by these two diseases are characterized by significant deterioration of social cognition. In the present case report we describe a 57-year old patient who suffers from both bipolar disorder and an old brain injury caused by a fall. Over the years of disease of illness the cognitive impairment and thus deterioration of social cognition has been observed.

CASE REPORT

57-year old man is treated psychiatrically since 1996 in the Department of Psychiatry and Psychotherapy of Medical University of Silesia in Katowice, Poland. His functioning in society has gradually deteriorated. During the treatment and diagnostics of patient's bipolar disorder, it turned out that he also suffers from dementia and progressing cognitive impairment. Bipolar disorder was diagnosed in 2004, characterized by episodes of depression and hypomania, finally treatment was successful with carbamazepine and participating in group therapy. The family history is positive for mood disorders. Patient's mother and sister were suffering from severe episodes of depression without any treatment. In 2004 the patient had an accident, during horse riding he fell off hitting his head. In subsequent years' tests have shown subcortical cerebral atrophy. Neuroimaging reveals that the patient's ventricular system was enlarged, symmetric and without any shift.

The patient was treated at the psychiatric clinic whenever his mood deteriorated, and psychological tests were carried out regularly. Over a period of seven years dramatic changes in the patient's brain functioning were observed. In the year 2005 investigations revealed disorders of attention and concentration, visual-spatial functioning and reaction time were slightly decreased after seven years. Specifically in the year 2012 neuropsychological tests' results showed deficits in recent memory, attention, concentration and the diagnosis was mild cognitive deficits. The ongoing deterioration in cognitive function was suggested to be demonstrating the gradual development of an early dementing process.

This dementing process was characterized by escalating memory deterioration, disability of planning, organizing and information processing. Patient subjectively felt decrease of emotional control and deterioration of cognitive function. With further deterioration of cognitive functions, the patient complained primarily of problems with memory and learning new material, thinking, attention and concentration disorders. Problems with understanding and selecting words, visual-spatial functioning disorders and social cognition disorders became more serious.

The main problem faced by the patient continues to be inability of social functioning. He is permanently frustrated because of losing ability of normal functioning among social groups starting from the smallest and closest group which is the family through work placement and his relationship with society. At home the patient had difficulties in the dialogue with his wife and children, and this led to the lack of understanding and contact deterioration between the family members.

The patient felt rejected and misunderstood. He could not find a common language with his children.

Hospitalization, his absence at home had affected the deepening of the conflict, in fact the family blamed the patient for their bad situation which had developed.

The patient's bad health situation forced him to choose early retirement. During episodes of mania he worked much more effectively, which has led to bad relations with employees as he expected the same attitude. When suffering depression he could not work and did not appear at work which has also increased conflict between him and his work colleagues. The progressive loss of concentration, attention, thinking, and often forgetting contributed to increasing loss of productivity at work.

DISCUSSION

Bipolar disorder is known to be associated with cognitive difficulties. This can have an important effect on the patient's ability to work. A recent study which compared return to work among patients with bipolar disorder and schizophrenia, while showing poor work outcomes with patients who had chronic schizophrenia also showed poor outcomes with patients with bipolar disorder (Dissanayake 2011). Such poor ability to work is related to the cognitive deficits which have been demonstrated in this disorder (Cusi 2012), indeed training programs have been suggested to remedy these defects (Lahera 2012). This comes as no surprise, because although neuroimaging studies originally showed no or less loss of grey matter with patients who have bipolar disorder than those who have schizophrenia (McDonald 2006), nonetheless patients with bipolar disorder do demonstrate some loss of grey matter (Monkul 2005), and this presumably reflects the presence of cognitive defects. However, the degree of ventricle enlargement observed with this patient is indicative of the coexisting dementing process (Nestor 2008). The findings of cognitive testing and imaging can be united in fMRI studies which demonstrate the relationship between cognitive impairment and imaging, (Mullin 2012). In our case report, the patient is also affected by an accelerated deterioration in cognition which has been attributed to a dementing process. For a better social functioning, it is important to determine the patient's treatment regimen. In addition to the pharmacotherapy for bipolar disorder it should also include forms of interaction that will improve the

patient's cognitive functions. Recently, considerable interest and popular cognitive rehabilitation will enable the patient to live a longer and independent life. This should include psychiatry and pharmacological treatment such as the training of the brain neuroplasticity, group therapy, art therapy, music therapy, choreotherapy.

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