



A series of drawings of a patient with schizophrenia-like psychosis associated with epilepsy: captured illustration of multifaced self-expression

Seriya crteža bolesnice sa psihozom sličnom shizofreniji udruženoj sa epilepsijom: zabeležena ilustracija različitih oblika samoizražavanja

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Abstract

Introduction. Drawings may give an insight into the complex mental process, however they have been underutilized in patients with psychosis associated with epilepsy. **Case report.** A 33-year-old, right handed female, diagnosed with schizophrenia-like psychosis associated with epilepsy, was treated in the Day Unit due to psychosocial rehabilitation. Besides other treatments, the patient underwent group analysis of drawings once a week. Qualitative analysis of the form and content of drawings made by free associations were performed. The varying of size and motives with vivid colours and the curve of perspective were documented in three figures, followed by the last drawing which was without such elements. **Conclusion.** A series of drawings of patients with psychosis associated with epilepsy is needed to record a possible variations and disturbance of the immediate mental process. Group sessions may additionally contribute to diminish stigma and enhance psychosocial reintegration.

Key words:

psychotic disorders; epilepsy; comorbidity; ambulatory care; art therapy; psychology.

Apstrakt

Uvod. Crteži mogu pružiti uvid u složeni mentalni proces, ali su nedovoljno primenjeni kod bolesnika sa psihozom udruženoj sa epilepsijom. **Prikaz bolesnika.** Žena, stara 33 godine, dešnjak, sa postavljenom dijagnozom psihoze slične shizofreniji udruženoj sa epilepsijom, lečena je u dnevnoj bolnici radi psihosocijalne rehabilitacije. Pored ostalih oblika integrativnog lečenja bolesnika, bila je uključena u grupnu analizu crteža koja se odvijala jednom nedeljno. Izvršena je kvalitativna analiza oblika i sadržaja crteža koji su nastali prema slobodnim asocijacijama. Variranje veličine i motiva crteža sa živim bojama i zakrivljenom perspektivom zabeleženo je kod tri crteža, dok kod poslednjeg nisu bili prisutni ti elementi. **Zaključak.** Neophodna je serija crteža kod osoba sa psihozom sličnom shizofreniji udruženoj sa epilepsijom da se registruju moguće varijacije i poremećaji trenutnog mentalnog procesa. Grupne sesije dodatno mogu doprineti smanjenju stigme i olakšati psihosocijalnu reintegraciju ovih bolesnika sa komorbidnim poremećajima.

Ključne reči:

psihotički poremećaji; epilepsija; komorbiditet; lečenje, ambulantno; lečenje umetnošću; psihosocijalni faktori.

Introduction

Epilepsy is related to numerous psychological challenges and may impair the overall emotional, cognitive, behavioral and social functioning among affected persons with many underlying causes¹. In accordance with the International Classification of Mental and Behavioral Disorders (ICD-10) schizophrenia-like psychosis associated with epilepsy appears in clear consciousness, is not directly linked to the ictus and persistent or recurrent delusions, hallucinations,

thought disorder and behavioral abnormalities may be present². The psychiatric symptomatology in epileptic patients was remarkably frequently similar to schizophrenia noted in non-epileptic patients³. After epilepsy was diagnosed, chronic interictal psychoses *de novo* developed with prevalence and average annual incidence of 6.0% vs 0.38%, respectively⁴.

Postictal and chronic interictal psychoses require psychopharmacological and multidisciplinary management⁵. Psychological interventions may be used combined in treatment of epilepsy to reduce the seizure frequency and impro-

ve the quality of life ⁶. To explore the artwork produced by patients with epilepsy rare controlled studies were performed ⁷. Drawing is a complex neurological task and may give an insight into mental processes and neuropsychological deficit, but it have been underutilized in patients with epilepsy ⁸. There have been a few reports showing that art therapy focus groups may enhance the self-expression of young persons and children with epilepsy ⁹.

A qualitative analysis of a series of drawings of a patient with psychosis associated with epilepsy as an illustration of self-expression is presented.

Case report

A 33-year-old, right handed female of elementary school educational background, was diagnosed with schizophrenia-like psychosis associated with epilepsy. She was referred to the Day Unit of our Clinic of Psychiatry due to psychosocial rehabilitation. The diagnose of psychosis was established according the ICD 10. The data were obtained from medical records, the history of the patient and her mother, as well as clinical examination. Epilepsy was diagnosed when the patient was 15 years old. The patient started an antiepileptic therapy, but in the beginning epilepsy was not well controlled, thus the patient experienced amnesic episodes and felt sleepy. So, her school performance achievement was poor and she was labeled as epileptic person by her school peers who avoided her. After epilepsy occurrence, parents controlled her day and night. They worried that she could fall and get hurt. She had no siblings, and her mother, a housewife, was devoted to her. Two years later she was hospitalized due to the first episode of psychosis and the antipsychotic was added to antiepileptic medication. She continued out-patient treatment by the neurologists and the psychiatrist. There was the history of tongue bite. However, a better control of epilepsy was achieved for the last three years and seizures with *grand mal* manifestations were not observed, but psychotic symptoms became more prominent. Despite it, she continued to be afraid of going out without her mother. She spent most time at home and rarely went out solely. She experienced paranoid delusions and hallucinations. She had no head injuries. There was no history of focal weakness and no family history of seizures recorded. The patient has never used the psychoactive substances except caffeine, that has consumed for 15 years.

Pre-treatment assessments were done by the use of Mini Mental State Examination (MMSE, Folstein) with the score 24 of 30 that revealed a mild dysfunction of concentration and attention, visual and verbal memory and of perceptuo-motor functioning were presented. The assessment was performed by using the Positive and Negative Syndrome Scale (PANSS). The PANSS total score was 57 (negative subscale score 16, positive subscale score 19 and general symptoms score 22). The patient gave informed consent on admission and Ethic approval was also obtained.

Integrative day treatment consisting of group psychotherapy three times a week and everyday occupational and recreative activities were applied. The patient participa-

ted group analysis of drawings once a week. The heterogeneous group consisted of patients with various mental disorders. The patients were asked to draw by free associations and free choice of colours. The same size of paper was offered. The drawings were exhibited in the group setting and, after voting, there was group discussion about them. Exploring the form and content of drawings series and group protocol analyses were done. For the first two drawings the presented case prepared by herself on a half of standard format of paper. She made the two similar motives consisting of the mosaic partially filled by vivid colours (Figures 1 and 2).

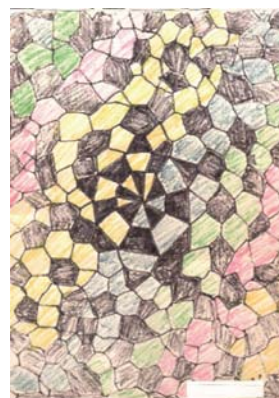


Fig. 1 – Mosaic partially filled by vivid colours (1/2 paper sheet).



Fig. 2 – Similar picture to the first one (1/2 paper sheet).

She avoided to discuss about them. On the next session she chose double size of paper and titled it “Town at night” (Figure 3). She used only two colours (black and yellow) with great contrast and with numerous squares for windows. Other patients liked her work and asked her about the perspective in the left corner of the drawing, but she told that there was not enough place for the tree. She named the last drawing “A boy with the guitare” (Figure 4) and explained that she had the guitare at home and played sometimes it. Following completion of day treatment the repeated PANSS score was 48. However, the patient was positive about her participation in the group analysis of drawings and in other group activities, suggesting a qualitative benefit from the treatment. The team members observed that she slightly diminished avoidance with less fear and spoke with other patients not only during therapies, but also between structured activities.

Discussion

Considering the drawings of the presented patient with epilepsy and psychosis, some artistic features different from the drawings of other patients with psychosis were noticed ¹⁰. The motives with intensive lines and mosaics of geometric details are repeated, but only partly filled by colours despite the double diminished size of the paper. It might illustrated the great anxiety and “horror vacui” which were described at art works of psychotics patients. However, these characteristics of the drawings of the presented case are similar to visual illusions described by some patients with epilepsy: increase or reduction in the size of objects of the real world, a dis-



Fig. 3 – “Town at night” with two contrast colours – black and yellow (2 x paper sheet).



Fig. 4 – “The boy with the guitare” (1 paper sheet).

tortion of proportions or contours, i.e. metamorphopsia, intensified appearance of colours (dyschromatopsia). These phenomena could be elicited by electrical stimulation of the occipital or the left temporolateral cortex affecting either a part or the whole visual field¹¹.

The presented patients spoke rarely in the group during the first two weeks. She showed dysfunction in personal, social, and cognitive areas, mild dysfunction assessed by clinical rating scales. After that, she partly adjusted to group activities and the setting in the day hospital. The day treatment program was the first structured psychosocial therapeutic and rehabilitation process that she was involved after many years. Besides her paranoid delusions, her social skills were poor, but the confidence in the treatment setting developed. This advantage was illustrated by the large size of paper she chosen to finish all the parts of the third drawing. The curving of perspective in one part of the drawing (Figure 3) could suggest that in the period of drawing she experienced some visual illusion. Some studies have shown that in the temporal lobe epilepsy seizures affect all the aspects of cognitive functioning¹². The psychosis associated with epilepsy, especially regarding the temporal lobe origin, differs from schizophrenia by the preservation of affect and prominent paranoid ideation¹³.

The last drawing of the presented patient expressed the advantage of her integrative treatment (Figure 4) by the normal paper size and content with humane figure in relaxation activity (playing the guitar). This varying of the size and motives of drawings could be speculated due to subclinical paroxysmal brain activities rather than they were only the products of the psychotic process, but repeated or continued electroencephalogram (EEG) were not obtained as evidences.

It has been reported that drawing may give insight into neurocognitive processes¹⁴ and some specific artistic features by epilepsy syndrome were noted⁸.

Epilepsy and psychosis comorbidity have great impact on a patient's lifestyle and therefore should be treated, but the side-effects of long-term medication have to be considered to.

Compared to other type of epilepsy free drawing is most sensitive to complex partial seizures with temporal focus⁷. It is a rare case, but drawing-induced epilepsy has been described with the focus in the right frontal lobe parietally spreaded, which is in accord with the current cognitive and neural network models of drawing¹⁵.

The epilepsy of the presented patients was controlled with medication without registered seizures for a three years. She had not experienced, but was at risk of unacceptable side-effects from medication. An integrative neurological and psychiatry treatment approach was necessary due to psychotic comorbidity¹.

Epilepsy-associated stigma in adolescents and adults lead to social withdrawal and loneliness worldwide¹⁶, but art work may arise understanding of these patients¹⁷.

In this paper no generalisations was possible since it was a case study. One of the limitations of the case report is that the exact intellectual and cognitive functioning of the patient prior to the onset of epilepsy could not be elicited, so, the exact deterioration of the cognitive and intellectual impairment could not be ascertained. The reassessment by neuroradiological examination and EEG might highlight the underlying process.

Conclusion

Drawings may be useful self-expression of the unique self-concept of a patient with epilepsy and psychosis and may also give an insight into their perceptions, thoughts and feelings about themselves and outer world. A series of drawings for each patient is needed to record a possible variation and disturbance of immediate neurocognitive processes. Group sessions may additionally contribute to diminish stigma and enhance psychosocial reintegration of these patients.

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