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C – Statistical Analysis  
D – Data Interpretation  
E – Manuscript Preparation  
F – Literature Search  
G – Funds Collection

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# ATYPICAL EPILEPTIC SEIZURES OR IDEATORY COMPENSATIVE EXPERIENCES?

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## SUMMARY

This paper reports the study case of a 23-year-old woman who was diagnosed with abnormalities in the central nervous system (EEG, MR), personality dysfunctions and various mental symptoms (including anxiety and depressive signs) but also – according to the first psychiatrist assessment – a psychotic disorder with visual hallucinations. Necessity appeared to determinate the ground for these visual signs: imaginal, illusionary or hallucinatory. Neurological and psychological tests were performed and psychotherapy was started. The results of the neuropsychological tests did not indicate the presence of organic changes in CNS. Traits of typical epileptic seizure were not found in the clinical picture of the reported seizure disorders. Based on interview, the patient's clinical status, psychological and imaging tests – epilepsy was excluded and a diagnosis of deep emotional disturbances was made.

**Key words:** visual perception, hallucinoids, sensory automatisms

## **INTRODUCTION**

A definition of hallucinations include mainly perceptions that are present without appropriate stimuli, those which affect perceived reality and are not volitionally controlled by the person who experiences them. Auditory hallucinations are the most frequent; visual ones appear significantly more seldom (Gawęda & Kokoszka 2011). Visual hallucinations are formed mainly in disorders of the frontal lobes, including the prefrontal, template and occipital cortex. Symptoms may be elementary or complex signs (Stolarska et al., 2009). Dysfunctions of visual perception can appear in the course of various disorders. These are as following: brain disorders (vascular or degenerative ones), various kinds of eye disorders, mental illnesses or untoward drug side effects (Krzemiński et al., 2006).

Compensatory experiences extend from the simplest signs (for example imaginal) to very complex psychotic syndromes such as the phantomatic syndrome reported by A. Majczak et al (1973). The diagnostic process is especially difficult when a lesion of the central nervous system appears. Attention is paid to the need for differentiation between hallucinations and para-hallucinations in the subject literature. Beck and Harris (1994) connected para-hallucinations with organic changes in the central nervous system. Some authors pointed to the possibility of visual hallucinations appearance in dementia (Bilikiewicz 1998; Cummings & Mega ). Para-hallucinations otherwise known as hallucinoids are perceptions created without external stimuli but the individual does not treat them as real phenomena. They include sensory automatisms (for example: flashes, whispers, strange smells or tastes in the mouth, single words, melodies). These symptoms occur the most often in seizure-like mode and usually are connected with damage to the central nervous system (for example with epilepsy) (Grabowska-Grzyb 2005).

## **CASE REPORT**

The patient is a 23-year-old woman, childless, with a higher education. She finished her degree in the field of medical engineering, next she started to study mechatronics but she resigned and now she studies informatics. For two years she has lived with a partner – he is coeval and an IT specialist. She describes her partner as a protective person although arguments occur quite often. She was raised by both parents. She is the youngest child among four siblings. She has three older sisters. She describes her relations with her sisters as very weak; she has always felt excluded by them, worse, repulsed and treated as a child.

Her parents have a secondary school education. Her mother did not work, she was a housewife. The patient describes her mother as frigid, reserved and an insensitive person. She has never had close relations with her mother. She highlights that her mother had never praised her for anything. The patient has better contact with her father, she spent a lot of time with him. She describes her father as a busy, warm and demanding person. The patient assesses herself as a very sensitive, secretive, mistrustful and shy person but with a vivid imagina-

tion. She has never been an outgoing social person, she preferred meetings in smaller groups; she usually had two friends. She has never had problems with learning, she did not have to repeat any classes at school, there were no behavioural problems. Her hobby is reading books.

For three years the patient has suffered from headaches, she has been taking medicines, she is under the care of a neurologist who in 2013 ordered an EEG and MRI of the head. The EEG: “record with suspicion of localise, focal changes, in the midline above the frontal motor area, in the form of groups of slow theta waves”. The MRI: “venous angioma with a length of 3.1cm and a width of 0.4cm in the white matter of the left frontal lobe, laterally from the lateral ventricle of the brain going down through the subcortical nuclei and cortical structures and flowing into the left vein of Trolard.”

In stressful situation attacks appear – the patient calls them attacks of breathlessness. She complains of sleeping problems, anxiety, restlessness, sadness, a lack of motivation to act, suicidal thoughts. She feels a strong fear of the future and of the belief that she will not manage alone in life.

Mental disturbances appeared in the patient while attending primary school. At that time she felt someone’s presence in the room. Next during her period of study at secondary school it seemed to her that she saw “a Jew who hanged himself”. She did not tell anybody about that; she explained it to herself that it could be due to the fact that her grandparents hid Jews during the Second World War and she had heard lots of stories about it. She quickly forgot about these experiences. The next episode occurred while attending high school. She saw a bloodstained man with an axe in his hands, although she verified it as unreal when she perceived that children were playing around him. She thought that it had been a misperception. At that time on the suggestion of a colleague she started to take an interest in lucid dreams. She used some techniques to learn how to control her dreaming. She wanted to have an influence on what she dreamed, wanted to visit and move to various interesting places. After these practices there occurred major problems with sleeping and with making a distinction as to what was true and what was fiction.

The next time a non-existing person appeared was in August 2012. The patient was working seasonally picking raspberries. She saw a man who was described as “a blond Norwegian man.” He introduced himself as Robert. They talked together very nicely. She felt that he understood her very well although she was surprised that the man knew of her problems, her life situation. She explained it by the fact that she came from a small town where everybody knows everything about others. After a few days the patient told a colleague about it but she stated that nobody like the patient had described worked there. For some time nothing happened till the moment when the patient saw Robert in her room. She felt great anxiety and embarrassment. She saw him only from the corner of her eye. For the next three months nothing happened; the patient did not see him. Robert appeared again in January 2013. He told her that she was worthless, that she should have quit university, that she was not ambitious; he suggested suicide.

At that moment the patient decided to go to a psychologist for the first time.

The psychologist performed a MMPI-WISKAD test. The results indicated mental disorder (“paranoid valley”) with a trend to simulation. The psychologist referred her to a psychiatrist, who diagnosed persistent delusional disorder and recommended taking perazine. After two weeks patient withdrew from taking this medicine – she could not tolerate it, had problems with concentration and was sleepy. In January 2015 she came to another psychiatrist who again referred her for a psychological examination and recommended again a neurological consultation. The neurologist decided to admit the patient to a hospital, neurological department for deeper diagnostics. The aim of the neurological consultation was to determine: can episodes of imaginal experiences be equivalent to epileptic seizures and is there a need to start antiepileptic treatment?

## **RESEARCH METHODS**

The following psychological methods were used:

1. MMPI2 scale
2. L.Bender test
3. Graham-Kendall Memory for Designs test
4. Benton Visual Retention Test
5. Subtests from Łucki’s Copybooks

The following imaging was performed:

1. Standard EEG
2. Holter EEG after sleep deprivation
3. Angio-CT of the head
4. MRI of the head

## **THE RESULTS OF THE PSYCHOLOGICAL TESTS**

The profile was accurate, possible to interpret. The patient has trends towards the exaggerating of existing problems and towards simulation. She excessively focused on her body and herself. She reports feeling of sadness, tiredness and being unhappy. She denies being in good health, reports a lack of energy to manage with everyday problems, complains of fatigue and weakness. She has not faith in herself, and has low self-esteem. She reports many somatic complaints, problems with sleeping. She feels emptiness and is low in spirits, expresses aversion to being with people, she isolates herself. The patient feels she is misunderstood by other people and unfairly treated by them. She can report bizarre thinking processes and a feeling of unreality. She shows dissatisfaction with close relationships and can have serious family problems manifesting themselves as a lack of support, a feeling of alienation from the family group and a lack of emotional ties with family members. She is uncertain, undecided, she has problems with decision-making.

She can feel anxiety, restlessness, apathy but also anger, impatience, irritability. She is poorly psychologically adapted and she has limited psychological resources for coping with problems. The patient is poorly oriented towards achievements, weakly ambitious, pessimistic. Most of the results on both the clinical and content scales are increased, something that suggests aggravation. Such a constellation of scale could meet the diagnostic criteria for psychotic disorders, even schizophrenia, but given the observation of patient during the examination, her ability to adapt to the examinational situation, the pace of work – it should be stated that the patient is not mentally ill but she has a need to pay attention to herself and her problems. During the interview the patient did not reveal any disturbances of thought content and processing, had adequate affect, good auto- and allopsychic orientation. The patient's personality traits meant that she answered test questions in a "cry for help" way. No symptoms of a psychotic disorder were found and the high results obtained on many scales can be the result of the patient's personality traits. The results of the neuropsychological tests are within the normal range.

## **RESULTS OF IMAGING TESTS**

During the hospitalization a standard EEG and Holter EEG after sleep deprivation were performed. Both tests revealed: "slight changes, sometimes with seizure-like traits, occurring during the waking state, in the temporal-parietal-occipital area mutually, predominantly on the left side and in the cerebral midline above the parietal region". Additionally Angio-CT was performed – no other changes were detected (only an earlier detected venous angioma in the left cerebral hemisphere). The results of the current MRI did not differ from earlier imaging performed in 2013. The clinical picture of these seizure-like signs is not typical for epilepsy. Seizure-like changes in cerebral bioelectric activity do not progress during the provoking methods used. An epileptic background for the occurrence of seizure-like attacks cannot be confirmed based on the examinations performed. Therefore ideatory experiences reported by the patient are not the equivalent of epilepsy and there is no need to start antiepileptic treatment. Afterwards neurological and psychological tests were performed and the results obtained – the psychiatrist did not recommend psychotropic medication but directed the patient for psychotherapy.

After the first session the psychotherapist observed low self-esteem, suicidal thoughts, depressive states, a great sense of loneliness, a sense of being non-understood and non-supported. Based on an interview and a few subsequent sessions the therapist equally observed a demanding attitude towards those closest, a sense of injustice regarding being overlooked, repelled and isolated from family matters, a sense of being rejected by her sisters and her mother. The patient reported anxiety due to the fact that she saw persons that did not really exist; these being a man her age named Robert and some other unspecified individuals. She has a critical approach to these symptoms but she is wor-

ried about the fact that people can notice she sees not really existing persons. She shows ambivalence in the relationship with her partner because on the one hand her partner supports her very much but on the other he is very demanding of her and declares that he will leave her if she is ill. According to the patient – a lack of money and the need to constantly deal with this deficit were always big problems in her family. The patients perceives her father as warm, supporting, and fundamentally a good person but largely being outside of the home due to gainful employment. She determines her father as her hero. According to the psychotherapist the symptom of the fictive friend is compensation for her deficit in attention and care, the lack of being understood as an important and accepted person. The patient expected the support from her parents (teaching her norms, rules, knowledge about the world), but she thinks that they were unable to do that. As she says – she needed someone who could show her how to behave in various situation but her parents did not give this to her and everything she knows about this she has gained from books and the Internet. The fictive friend plays such a role, advises her, supports her, is interested in her problems. Psychotherapy with the patient included elements of psychodynamic and cognitive methods – to deepen her insight into her own defence mechanisms, acquaint her with her emotional and developmental deficits and work on the abreaction of blocked emotions resulting from these deficits. Support and positive enhancement affect her very well; they motivates her to act, improve her mood, increase her self-esteem. The patient willingly attends therapeutic sessions and is going to continue them.

## **DISCUSSION**

The authors showed the case of a patient with low self-esteem, lack of self-confidence, a sense of alienation, highlighting the lack of warmth and support from her family. The patient remains in an informal bond with a man but this relationship does not give her full satisfaction. She also has no explicit plans about her future job and wonders if she has chosen appropriate courses of study. A sense of loss and a lack of purpose in life are visible. Against the background of low self-esteem and a lack of satisfaction with her past life some experiences occur that can be viewed as compensatory imagination. Ideatory experiences occur – maybe amplified by illusive symptoms – which fill the sense of emptiness. The patient has a sense of discomfort, looks for psychological, neurological and psychiatric help. The first psychiatrist diagnosed persistent delusional disorder. The results of head imaging tests have displayed some pathological traits but clinical neurological observation excluded a correlation between reported experiences and organic changes.

Analysis of the reported visual symptoms indicates that they are illusive signs developing on the ground of emotional experiences. Any psychotic process was excluded. No data for maintaining a diagnosis of delusional disorder was found. The “Paranoid valley” revealed in the first MMPI-WISKAD test was not confirmed

in the second MMPI-2 test. Psychotherapy was started and the patient gained critical insight into her own experiences, while anxiety and restlessness were reduced. Psychological assessment points to the emotional background of ideatory experiences reported by the patient.

This results obtained might be explain by the microgenetic theory of symptom formation (Pałchalska et al. 2015). According to microgenetic thinking the initial construct arises in a brainstem or hypothalamic pacemaker and passes to archaic planes of limbic cortex that mediate the core self. Here are the configural correlates of forgotten memories, the irretrievable residues of early experience, “drive representations,” and the core beliefs and values instilled in childhood. This phase of personal memory, emotion, value and belief establishes the biases, dispositions or presuppositions that ground character and the fundamental traits of personality. Intrinsic patterns of instinctual drive tempered by value in the developing configuration come into prominence with a relaxation of sensory input in the transit to limbic formation. The core retains the potential for diverse expressions of the personality, though in time it, too, is restrained by habitual tendencies in thought and behavior. The “me” can give rise to many possible “I”s but the “I” of that moment is a commitment. We see a transition from the implicit and unconscious to the conscious and explicit in all areas of cognition, e.g. a word that individuates from the “mental lexicon,” a recollection from the “memory store.” We also see the correlates of this dissociation (transition) in pathology, e.g. procedural learning in amnesics, perception in hemianopic fields, semantic priming and preserved inference in the persons with global aphasia (Pałchalska, Kaczmarek & Kropotov 2014), and so on. The transition from concept to object, store to item, lexicon to word, or unconscious to conscious, is not a transfer of *like* to *like*, as if the depth were a mere *container*. The transition of category to instance or whole to part occurs over a *qualitative* series of covert internal phases. Conscious particulars are not dormant constituents waiting for activation; they become what they are in a passage to individuality.

The silent “I feel, I want ...” of inner speech is experienced as a unit. Like the “I” in “I think,” it does not fully convey the wholeness of the self. One could think one thing and say or feel another. For the self, the “I” is most prominent not in action, but in states of indecision. Every action delimits the self’s potential. What one says, except in states of strong belief or emotion, does not adequately satisfy the possibilities of self-realization. Even in states of strong emotion, when the self is not hindered by uncertainty, a person may apologize after an outburst, or say, “I don’t know what came over me,” as if the self was distinct from, and overcome by, its own emotions (Pałchalska, Kaczmarek & Kropotov 2014).

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