

PARTICULARITIES OF THE PSYCHIC DISORDERS THAT OCCUR IN THE CEREBROVASCULAR DISEASE

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Abstract: The cerebro-vascular disease is a complex neurological disease with significant implications for the mental life, destroying and reorganizing it from the organic personality disorder to the vascular dementia. The damage of the brain tissue due to infarct or hemorrhage – slowly leads to mental disorders. According to H. Ey, a huge number of mental disorders are caused by organic processes such as brain tumours, intoxications, encephalitis, cerebro-vascular diseases. The psychiatric clinical picture depends on the organic process that imposed the damage's shape and degree, but the symptoms do not depend directly on the pathologic process. The symptoms are the effect and the expression of a disorganized mental life and of its' typical reorganization on a structural floor that characterizes and defines each type of mental disorder.

Cuvinte cheie: boala cerebro-vasculară, sindrom psiho-organic, manifestări psihopatologice

Rezumat: Boala cerebro-vasculară este o afecțiune complexă, aparținând domeniului neurologiei, dar cu semnificative implicații în viața psihică, destrucându-o și reorganizându-o de la tulburarea organică a personalității până la demența vasculară. Afectarea țesutului cerebral prin infarctizare, hemoragie – conduce lent spre dezvoltarea unor maladii psihice. După H. Ey, un mare număr de afecțiuni mentale sunt determinate de procese organice – cum ar fi tumori cerebrale, intoxicații, encefalite, tumori cerebrale, boli cerebro-vasculare. Tabloul clinic psihiatric depinde de procesul organic care a impus forma și gradul afectării, dar simptomele nu depind în mod direct de procesul patologic. Simptomele sunt efectul și expresia unei dezorganizări a vieții psihice și reorganizarea sa la un nivel tipic, pe un palier structural care caracterizează și definește fiecare formă de maladie mentală.

INTRODUCTION

The cerebro-vascular disease is a complex neurological disease, with significant implications for the mental life, destroying and reorganizing it from the organic disorder of the personality to the vascular dementia.

The damage of the brain tissue due to infarct, ischaemia – slowly leads to mental disorders. According to H. Ey (1962), a huge number of mental disorders are caused by organic processes such as brain tumours, intoxications, encephalitis, cerebro-vascular diseases. Also, it may be considered that the same morbid process corresponds to a great variety of mental diseases. What becomes manifest though, at a clinical level, in the great majority of the pathological cerebral processes, is the common psycho-organic syndrome (5).

The psychiatric clinical tableau depends on the organic process which imposed the form and the degree of the disease, but the symptoms do not directly depend on the pathological process. The chronic character of the cerebro-vascular disease with a long evolution entails major medico-social problems, marking its importance among the neuropsychic diseases.

Although they are characterized by the psycho-organic syndrome, the psychic disorders that describe the cerebrovascular disease could still be classified from a psychiatric point of view as follows:

1. **The paroxysmal psychic disorders** – appear spontaneously, they do not last for long and touch most of the life's compartments, frequently taking the forms of memory, perception, thinking and emotional disorders,

delirium. According to H. Jackson (6), the ideas of grandeur, impulsivity, agitation, anxiety cannot be considered direct effects of the lesion and are, in fact, secondary to the regression degree involved in the cerebrovascular disease.

2. **The short-term psychic disorders** can take the form of confusing and crepuscular moods, psychotic and affective episodes, and they last for hours or days:
 - a) The crepuscular mood – the narrowing of the conscience and the distortion of the sensorial reflection, associated with the alteration of perception, affectivity and ideation – it only lasts for hours or days and it has a qualitative nature.
 - b) Disorders of the lucidity of the conscience, such as: those of the obnubilating type – with hypoprosexia, bradypsychia, temporal disorientation, evocation hypomnesia, motor slowing, confusing moods – with temporal-spatial disorientation, dysmnnesia, amnesia, incoherent thinking, verbal stereotypes, and difficult verbal contact, sometimes psycho-motor agitation, hallucinations, delirant ideas (9).
 - c) Affective and behavioral disorders – they also have an abrupt beginning and end, taking the form of anxious reactions, annoyance, dysphoria, psycho-motor restlessness, and autoaggression with an autolytic potential, psycho-motor restlessness with violence. The affective-organic disorder and syndrome, with an acute or insidious beginning, can last for a few weeks up to a few months and can become manifest as a depressive and maniacal syndrome; the affective organic syndrome can vary from

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very mild forms to severe or psychotic ones and it is often difficult to distinguish it from a maniacal or depressive episode which cannot be attributed to any specific organic factor; it can be accompanied by delirium, hallucinations or mild cognitive impairment. (1, 2, 5).

- d) The mild cognitive impairment is considered by some psychiatrists as being the prodrome to dementia and it is the transition phase between the normal senescence and dementia (vascular), taking the form of a memory loss which is sometimes difficult to be revealed without applying some clinical scales (4).
- e) The amnesic disorder and syndrome - the memory disorder is the only symptom and the cognitive impairment prevails. The amnesic syndrome is the result of the pathological process which causes bilateral impairment at the level of the diencephalon and the medial temporal structures such as fornix, hippocampus and the mamillary bodies (7). Short-term memory and recent memory are affected, as well as the memory of the recent past, but immediate memory remains intact.
- f) Organic hallucinosis – characterized by persistent and recurrent hallucinations on a clear background of conscience, which can appear at the level of one or more sensory modalities: olfactory, visual, auditory and tactile (rarely).
- g) Organic delusional syndrome and disorder – is characterised by the presence of the delirium against a background of clear conscience, vigility and sometimes, especially with women, can be accompanied by complex partial seizures/convulsions. Delirium can be systematized or fragmentary and it can often be accompanied by a mild cognitive impairment, hyperactivity or apathy, dysphoria. In the case of the cerebrovascular disease, the organic delusional disorder appears more frequently in the lesions of the temporal or parietal right lobe.
- h) Organic anxiety disorder – is characterised by recurrent panic attacks or generalised anxiety clearly attributable to the organic factor, and the cognitive impairment is a secondary phenomenon.
- i) Delirium – is considered an organic mental disorder if the organic etiology is known or suspected. It is usually characterized by an acute debut of the cognitive dysfunctionality following a diffuse organic cerebral disorder. The delirium is reversible, its evolution being generally fluctuant and short. The delirium may have prodromal symptoms such as restlessness, anxiety, and hyperesthesia. The clinical picture reunites confusion, disorientation, difficulty in testing the reality, incapacity to distinguish illusions, hallucinations, dreams – which contributes, in a vicious way, to the disturbance of the sleep–awakening cycle. The coherence and processes of thought are affected – towards disorganized thinking, bradypsychia. The differential diagnosis of delirium is primarily based on the comparison with dementia. The acute beginning, the short period of time (days, up to one month), the disturbance of the sleep-awakening cycle, the diurnal fluctuations of the psychic symptoms – are signs of delirium.

3. **The permanent psychic disorders** – adjacent to the cerebrovascular disease, they develop insidiously and become identifiable after approximately six months from the organic cerebral disorder. They appear under the form of psychopathoid moods (organic personality disorder) and deficitary moods (dementia).

- a) The organic personality disorder – is characterised by a

major personality transformation involving character changes as compared to the previous level of functioning and, also, by a structural reorganization of the personality (8), developing: mood instability, irritability and clastic anger (explosive reactions); psycho-affective viscosity (Bleuler, Minkowski); character disorders such as: suspicion, irritability, disproportional reactions to stimuli, low tolerance to criticism – going up to clastic crises and heteroaggressive manifestations, with multiple conflicts in family and socio-professional life; rigidity; emotional impoverishment.

Modern psychiatry includes in the category of organic personality disorder not only a change of the previous behavioral patterns but also an exacerbation of the personality traits. The cardinal trait is considered to be the lack of control of the impulses and the dysfunctionality of the control of the emotional manifestations, so that apathy and euphoria may prevail. Elation is absent but euphoria may imitate hypomania. The poor control of the impulses can be expressed as pulsional disinhibition (inappropriate jokes, sexual advances), antisocial behaviour that leads to law breaking because of the inability to anticipate the social or legal consequences of one's actions. The organic personality disorder claims a clear sensorium and may sometimes be associated with mild cognitive impairment. The evolution of the organic personality disorder, with a cerebral vascular determinism, is chronic and the diagnosis is reserved because the clinical tableau frequently turns out to be a demential one (6, 9).

- b) Dementia – is described by a loss of the intellectual and cognitive abilities, significant enough to alter the occupational or social performances. Classically, it is defined as a profound, global and progressive psychic deterioration which affects the basic intellectual functions and disintegrates social behaviors. The complete clinical tableau includes memory, abstract thought and judgment deficiencies, as well as different degrees of personality changes (8). From a psychiatric point of view, two types of dementia are described: **primary degenerative dementia**, or of the Alzheimer's type, and **multi-infarct dementia** – classified as vascular dementia.

Vascular dementia, caused by some significant cerebro-vascular disorders, frequently appears as a consequence of some ischemic strokes and more rarely of hemorrhagic ones. It is a frequent disease and it was identified by some authors at 30-40% of the stroke patients. It is prevalent at ages between 60 and 70, although it may appear at younger ages too, and it is more frequent with men than with women. The vascular disease is present and responsible for dementia and the focal neurological signs. The malady affects the small and medium cerebral vessels, leading to infarct and generating multiple parenchimatose lesions spread on large cerebral areas. The clinical picture of the multi-infarct dementia reunites a variety of symptoms: cephalitis, dizziness, asthenia, fatigue, focal neurological symptoms, dysmnasia, sleeping disorders, personality changes, frequent pseudobulbarism, disartry and dysphagia (4). Nevertheless, a correct clinic diagnosis of vascular dementia needs five stages, and those are:

- 1) The evaluation of the cognitive deficit – through the use of some intricate neurological and psychiatric criteria;
- 2) The assessment of the risk factors for strokes (Arterial Hypertension, cardiac affections with an emboligen potential, diabetes, dyslipidemias, heredity);
- 3) Brain imaging (CT/CAT and MRI) to identify the cerebral lesions of the vascular type;
- 4) The differential diagnosis of vascular dementia, especially with Alzheimer's Dementia, the possible coexistence of the

two (mixed dementia);

- 5) Establishing the temporal connection between causes of the vascular dementia.

Etiologically, neurology identifies four types of vascular dementia: Multi-infarct Dementia, Binswanger's Disease, brain bleeding dementia, CADASIL Syndrome.

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