AFFECTIVE PATHOLOGY IN THE STRUCTURE OF ORGANIC PSYCHOSYNDROME IN TUMORS OF DIENCEPHALIC LOCALIZATION

Yuliya Sidneva, Ludmila Astaf’eva, Oleg Zaitsev, Pavel Kalinin & Maksim Kutin

N.N. Burdenko National Medical Research Center of Neurosurgery, Moscow, Russia

The tumors of the thalamic-hypothalamic-pituitary system (diencephalic region) include a fairly large group. These are pituitary adenomas, craniopharyngiomas, pineal tumors, gliomas, meningiomas, and others. Tumors differ in the location, histological structure, and manifestations of the clinical picture with the corresponding hormonal changes, approaches and methods in treatment.

Psychopathological symptoms are revealed in the symptoms of lesion of the diencephalic region in addition to cerebral, neuroendocrine symptoms, neurological disorders. It is represented by emotional, motivational, personal, cognitive impairments, inversion of the sleep-wake cycle, seizures.

Disorders of mental activity are detected in all tumors of this localization in varying degrees, according to the authors from 20 to 100%. Affective pathology varies from 2 to 80% by the literature. The psychopathology of affective disorders in tumors is diverse in its manifestations and may be due to the localization of the lesion (irritation) of the brain, the histology of the tumor and, accordingly, changes in the level of neurohormones.

The leading place is occupied by pituitary adenomas. Pituitary adenomas have 15% among all brain tumors; occupy the 1st and 2nd places by detectability at the age of 15 to 54 years. By hormonal activity, pituitary adenomas are divided into prolactin-secreting (25%), GH-secreting (15%), ACTH-secreting (10%), TSH-secreting (1%) and hormone-inactive adenomas (GNA) (40%). Craniopharyngioma is 3-4% among all brain tumors (1-4% in adults, 6-10% in children).

Affective pathology occurs from 30 to 60% with hormone-active pituitary tumors, with hormone-inactive - less than 6%. At the same time, with craniopharyngiomas with a decrease in hormone secretion, emotional disturbances are detected in 67% of patients. Mood changes, anxiety (panic) and autonomic disorders, personality disorders are detected in patients. Depression in the structure of violations is sometimes difficult to isolate for various reasons. So, with craniopharyngiomas, depression occurs only in 2% of patients with the suprasellar variant of tumor growth (67%).

The study of affective disorders on the model of local brain damage with neuroendocrine disorders will bring to understanding: pathogenesis processes in the brain, adaptive responses of the body; new features in the diagnosis and treatment of disorders; rehabilitation of patients.

Objective: To study affective disorders in adult patients with pituitary adenoma and craniopharyngioma.

Subjects and methods: 90 patients (18-72 years old, mean age 38+2): pituitary adenomas - 40 (44.5%), craniopharyngiomas - 50 (55.5%). Methods: psychopathological, data from endocrinological, neurological, neuroimaging methods.

Results:
1. Growth-hormone-producing adenomas - emotional disorders are in 60%.
2. Adrenocorticotropic hormone-producing adenomas: a) Cushing’s disease - changeable mood, depression, apathy, sleep disturbance, with visceral symptoms (tachycardia, fluctuations in blood pressure) are in 50%.
3. Prolactin-producing adenomas (prolactinomas) - emotional disorders, sleep disturbance are in 30%.
4. Thyroid-stimulating hormone-producing pituitary adenomas - increased emotionality, excitability, changeable mood, with frequent “panic attacks” are in 56%.
5. Hormone-inactive pituitary tumors:
   a) Non-functioning pituitary adenomas - psychopathology is present in 6%. There are violations of sleep, changeable mood, weakness, decreased memory.
   b) In craniopharyngiomas emotional and personality disorders was in 67%. This is combined with cognitive, motivational and other impairments.

Conclusion: Affective pathology in tumors of the diencephalic region is largely due to the localization of the tumor, the corresponding damage to brain structures, changes in the levels of neurohormones. The affective pathology of the psychoorganic syndrome can be combined with other psychopathological symptoms - amnestic syndrome, hallucinations, delusions, disorder of consciousness and others.

Key words: affective pathology - organic psychosyndrome - pituitary adenoma - craniopharyngioma