CLINICAL AND PATHOGENETIC ASPECTS OF HYPOTHALAMO-PIPOPHYSICAL SYNDROME IN PATIENTS WITH EPILEPSY

Djurabekova Aziza Taxirovna
Doctor of Medical Sciences, Prof.
Head of the Department of Neurology and Neurosurgery,
Samarkand State Medical Institute,
Amonova Zakhro Kakhramonovna
Assistant Department of Neurology
Samarkand State Medical Institute,

The fundamental congestion of understanding the brain in epileptic seizures is presented at the end of the 19th century, by the English neurologist Jackson, as a short, spontaneous, electro-chemical "circuit" of the brain, depending on brain activity and location (1, 3, 10). According to statistics from the WHO organization, 50 million people suffer from epilepsy, and according to global estimates, up to 50 cases of the disease are registered annually per 100 thousand people. Epilepsy cannot be "infected", but many underlying diseases are the pathogenetic mechanism for the development of epilepsy. In addition, the complexity of the disease is largely in an unknown etiopathogenetic factor, marked by significant clinical polymorphism and dynamism, which in turn complicates the diagnosis and prognosis of the disease (2, 6, 8).

According to many authors, the state of the brain in epilepsy, involving the pathological process as a single system, as a result of the work of nonspecific systems, the nature of which is determined by mental, autonomic, neurohumoral and neurohormonal manifestations (4, 5). Accordingly, understanding the influence of the hypothalamic-pituitary system in epileptoid patients makes it possible to expand the assessment of the clinical and diagnostic picture of the disease and the ability to optimize treatment tactics. The regulation of the cerebral function of the hypothalamus, which ultimately constitutes the hypothalamic-pituitary system (HPS) by the hormonal background, simulates epileptic activity, the study in this direction creates a prerequisite for new promising approaches to the treatment of epilepsy, taking into account the lack of effectiveness of antiepileptic drugs (7, 9). In the scientific research literature, the study of hormonal imbalance is most often presented in the period after seizures, but after all, chronicity, with a compensation mechanism, proceeds with the participation of the neuroendocrine system, such adaptation mechanisms are poorly understood, or studied at the stage of the disease, without a long-term prognosis. Thus, the influence of HGS in patients with epilepsy, with clinical manifestations, on the course and prognosis of the disease, determine the urgency of the problem.

Purpose.

To study the effect of HGS on the formation of clinical and neurological manifestations of epilepsy.

Material and research methods.

The examination included patients with epilepsy who were inpatient treatment at the Department of Neurology and Neurosurgery of 1-Clinic SamMI for the period 2018-2021, patients who were registered at the endocrinological dispensary in Samarkand. the age of the examined patients varied from 15 to 46 years; experience of the disease from one to 11 years. In accordance with the classification (international classification of epilepsy and epileptic seizures of the International League Against Epilepsy 2017), patients were examined with symptomatic epilepsy, cryptogenic epilepsy (ideopathic).

All patients underwent dynamic EEG studies. In addition, in accordance with the goal, the patients were tested in the blood of the hormones ACTH, cortisone, theroxin (T4), trtrethyroxine (TD), theotropin release harmonic (TRH), theotropin (THG) using standard kits by radioimmunoassay. If necessary, patients were examined using an echoencephaloscopy apparatus using standard leads. Basically, the structure of the brain was studied by the method of magnetic resonance computed tomography (MRI). The total number of examined was 63, of which 20 patients with symptomatic epilepsy (SE), 18 patients with SE and signs of hypothalamic-pituitary syndrome (HPS), 15 were the control group, practically healthy individuals. Statistical processing of the obtained data was processed on an individual computer using the methods of variation statistics, with the calculation of average values.

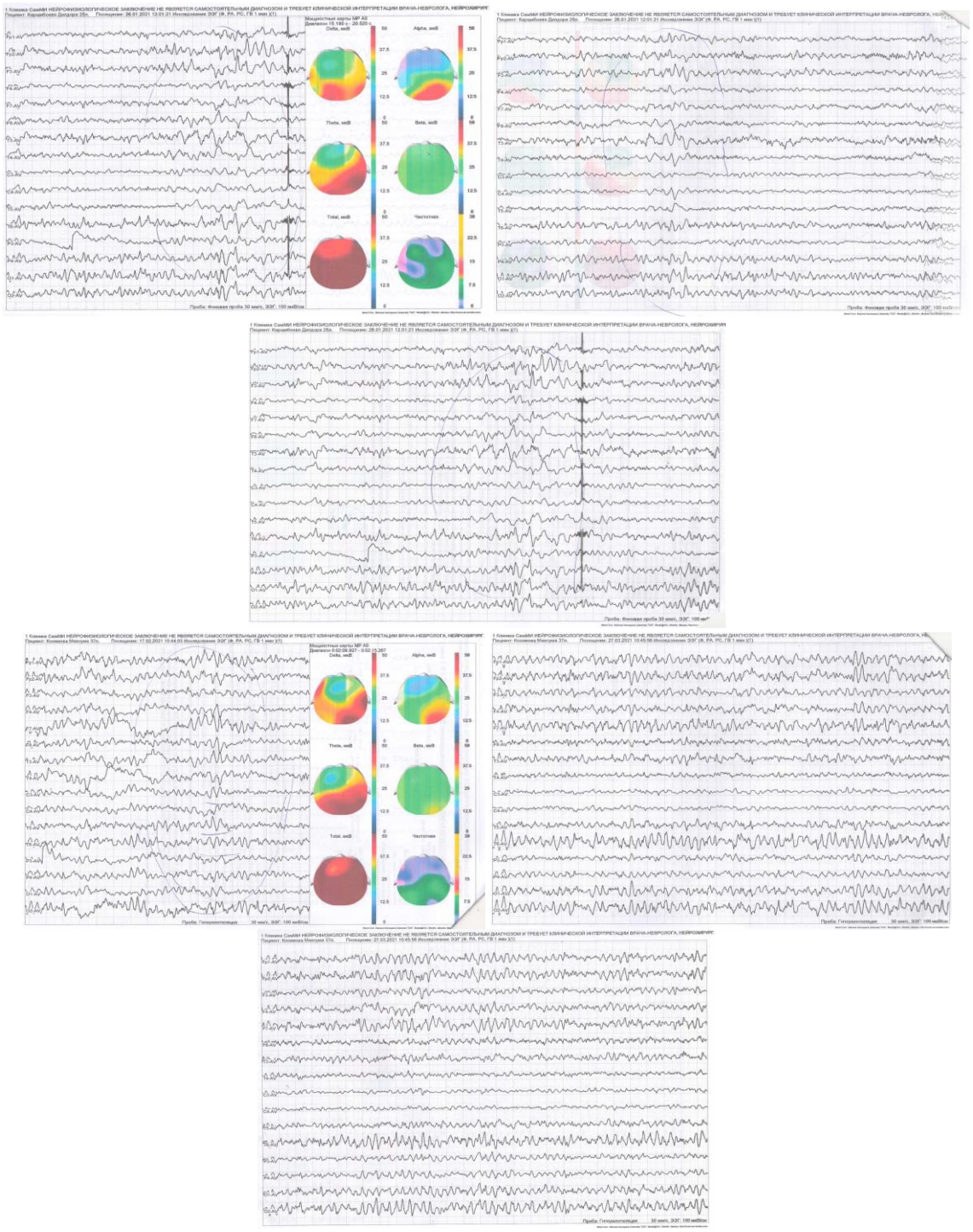
Research result.

As mentioned above, the duration of the disease in the groups is identical, despite these indicators, epileptic seizures in group 2 were severe, seizures were more prolonged and frequent. If in group 1 seizures were traced (after a detailed anamnesis) as a consequence of an inflammatory brain disease, or as a consequence of traumatic brain injury, then in group 2 almost all patients (with confirmation from relatives) could not justify the cause of the disease.

However, attention was drawn to the specificity of the external data of patients of group 2, in particular, overweight in 8 patients. In the area of the abdominal wall, striae are clearly visible. Young women, 18-28 years old (3), complained about headache and periodic dizziness (taking into account the main problem of epileptic seizures). Expressed autonomic symptoms, autonomic lability, unstable arterial hypertension, often against the background of headaches. The most reliable was the absence of the menstrual cycle (aminaria), which confirms the hypothalamic-pituitary syndrome in these patients. There was a high value of prolactin and lower values of TSH, the value of liptin varied in the aisles up to 12 ng / ml. In one patient, along with animorrhea, obesity, moonlike face, and hypertrichosis were noted. Another patient had a Cushingoid type of constitution, body weight was 2 times higher than normal. Stable arterial hypertension, sometimes reaching numbers up to 160/100, increased blood glucose, skin with signs of bruising, dryness, an increase in cortisol was noted.

A 46-year-old patient of the second group complained of headache for a long time, and only after epileptic seizures against the background of hypertensive syndrome recurred, he turned to doctors, with the recommendation of neurosurgeons, an MRI study of the brain was carried out, with a view of the Turkish saddle area. Against the background of MRI, a cerebrospinal fluid of the pituitary gland was detected for 2 years, the patient was observed and performed MRI in dynamics, there were no signs of pituitary disease during this period, a slight increase in prolactin was noted from laboratory tests, taking into account dietary restrictions, gaining weight. In the

epilepsy group with HGS, a 29-year-old woman was examined, menarchia from 12 years old, the menstrual cycle was irregular, married at the age of 25, the reason for contacting the antenatal clinic was the absence of pregnancy. He takes anticonvulsants irregularly (according to his mood). Examination by a neurologist showed no focal abnormalities; thin-looking, aggressive, hot-tempered and labile psyche, fatigue. Pelvic ultrasound revealed uterine hypoplasia, decreased ovarian volume, and decreased TSH levels. On MRI, the pituitary gland is not enlarged, the funnel is deflected to the right. Contrast determination revealed a negligible filling effect, that is, this patient had a microadenoma. In the same group, a 31-year-old patient, living in Samarkand a year ago in a neurosurgical center in Moscow, was operated on for a pituitary macroadenoma, epileptic seizures in a patient aged 12 years old, a genetic predisposition was excluded, seizures are rare but prolonged, he takes anticonvulsants regularly, once admitted to the intensive care unit with status epilepticus. Before pituitary adinoectomy, the patient was concerned about low potency. Electroencephalographic indices were somewhat noted in the groups, for example, in the group of epilepsy patients with HGS, epileptic discharges were recorded in the form of single acute waves. In group 2, in patients with favorable course of the disease, there was a shift in the effective average frequency of the spectrum towards the slow wave pathological activity, the characteristic signs were the mid-depth structures of the brain and a change in the rhythm of bioelectric activity.



Thus, the activity of the altered HGS affects the functional restructuring of the state of the brain in patients with epilepsy. This change is confirmed by electroencephalographic indicators, indicators of neurovegetative disorders and hormonal levels in the form of the hypothalamus-pituitary-adrenal glands. The pronounced degree of HGS impairment correlates with the severity and clinical manifestations of epilepsy. Accordingly, the result of the study showed the need for additional diagnostic examination of patients with epilepsy, and the inclusion of hormonal correction in complex therapy with the involvement of narrow specialists.

Conclusions

1. Dysfunction of the hypothalamic-pituitary system, plays an important role in the functional restructuring of the brain in patients with epilepsy, is manifested by polymorphic symptoms.

2. An informative and adequate method for determining the hypothalamic-pituitary syndrome in patients with epilepsy is to determine the status of hormones in the hypothalamus-pituitary-adrenal chain to identify the severity, duration of the disease and the effect on positive clinical diagnosis.

Literature

1. Hasanova R. Clinical aspects of hypothalamic syndrome / R. Khasanova, H. N. Maksudova // Nevrologiya. - 2017. - Volume 72. N4. - S. 37-39. - Bibliography: 57 titles. MeSH-main: Hypothalamic disease (genetics, epidemiology, etiology) clinical research (use, methods)
2. Aminova D.A. Modern aspects of the genetics of epileptic encephalopathy and symptomatic epilepsy in children: scientific publication / D. A. Aminova // Neurology. - Tashkent, 2012. - N3-4. - C. 182-183 (Code N9 / 2012 / 3-4)
3. Voronina I.A. Differential diagnosis and personalized prediction of outcomes of operations in patients with neoplasms of diencephalic and suprasellar localization // Abstract of the thesis ... d.m.s., Moscow, 2017, 40 p.
4. Voronina I.A. Endoscopic transsphenoidal removal of pituitary adenomas growing into the cavernous sinus / P.L. Kalinin, O. I. Sharipov, I.N. Pronin, M.A. Kutin, I.A. Voronina et al. // Journal of Neurosurgery Issues named after N.N.Burdenko.- 2016.- 80 (4) .- pp. 63-73.
5. Voronina, I.A. Hemorrhage in pituitary adenomas (pituitary apoplexy). Basic ideas about the causes of development and the choice of treatment methods. Literature review / M.A. Kutin, L.I. Astafieva, B.A. Kadashev, P.L. Kalinin, I.A. Voronina et al. // Bulletin of neurology, psychiatry and neurosurgery. - 2016.- No. 3.- S. 50-62.
6. Shalkevich L.V., Kudlach A.I., Nazarova O.P. Influence of hormones of the hypothalamic-pituitary-adrenal system on the processes of epileptogenesis // Russian Journal of Children's Neurology, 2017, No. 1, VOL. 12 / VOL. 12, p. 47-55
7. Shalkevich L.V., Shanko G.G., Cat D.A. Corticosteroid therapy of pharmaco-resistant epilepsy in children. International Neurological Journal 2014; 3 (65): 20–7.
8. Munakata M. et al. Reduction in glutamine / glutamate levels in the cerebral cortex after adrenocorticotropic hormone therapy in patients with West syndrome. Tohoku J Exp Med 2014; 232 (4): 277–83. PMID: 24705707.
9. Ikramov A., Djurabekova A., Igamova S., Khamedova F. - Clinical and instrumental features of the course of epilepsy with malformation in children. // No. 12 2020, Annali d'Italia, VOL. 1.P-30-33
10. Kasimov A., Abdullaeva N., Djurabekova A., Shomurodova D. - Features of diagnosis and clinic of post-traumatic epilepsy against the background of concomitant somatic diseases // International Journal of Pharmaceutical Research | Jan - Mar 2020 | Vol 12 | Issue 1 Research Article, R. 1788-1792