Certain importance of the detailed study of hypersomnial accesses was paid long ago — in 1925 W. Kleine and M. Levin after in 1935 were the first to investigate them; later G. Stiefler (1936), B. Roth (1956) and A. M. Vein (1966) also reported their experience.

M. P. Astvataturov (1939) presumed the syndrome of periodical hypersomnia (PH) to be a hysterical manifestation. But the further studies of the problem shew that there was a pathogenical relation to the organic disorders of the mesodiencephalic brain structures. S. N. Davidenkov (1961) reported in details even complex functional-organic forms of the cited neurological pathology.

The analysis of the differentiative-diagnostical difficulties coming out of the clinical interpretation of PH with functional damages of the central nervous system (CNS) put forward the object of the present study: to investigate the clinical peculiarities between the hysterical and organic-originated PH.

Three patients with PH were under our study; they were accepted and treated in the Clinic of Neurology, Higher Institute of Medicine, Varna city.

**First patient:** S. Y. A., age 12 years, CR N. 9718/1979. Accepted to the clinic with syncops and accesses beginning 4—5 months ago after several psychotraumatisical situations. During this period the patient was hit on the head with a short lost of consciousness; therefore, the question for an organic genesis of the syncops was open. In the next months the child had several times heavy contorts, every one of them with an emotional background, fainting, quadrihypotonia and coma; the mean duration of these situations was 3—4 hours. During sleep which was twice examined in the clinic, and after outer pain irritations, the child awoke relatively hard and late.

The objective investigation and laboratory data of the blood, urine, craniographies, liver tests, pulmonary examinations, were all in the normal ranges. The first EEG-recordings in the clinic shew averagely expressed diffusive changes with high-voltage sleep potentials and tetra-waves, forming short discharges. In the course of the recording itself the child fainted without any registered paroxysmal EEG-changes. On the next day the subjective complaints faded the EEG-recording was normal. After a second syncop BEA (bioelectrical activity) was registered in a comatotic state; slow and delta-waves tending to hypersynchronization, corresponding to the IV-th phase D after A. Davis et al. (1938), were read. The treatment with sedative preparations, psycho- and physiotherapy allowed that the child was discharged healthy, with normal neurological status and EEG-recordings; there were no recidivations registered by the control examinations later.

**Second patient:** F. A. M., age 14 years, CR N. 21365/1972. There were anaemnestical data for a heavy psychotrauma (rape-attempt) in the Spring, 1972. Since then the child complained of headache, staggering, temporary lo-
gopaedical defects without expressed neurological symptoms. Sometimes the child raised temperature up to 39—40° C with somnolent condition for a period of 2—3 hours, normal pulse, breathing and no disorders in the laboratory analysis. The objective investigation revealed out walking of the type asthasia-abasia. The applied psycho- and physiotherapeutical treatment improved the subjective complaints of the child; the hypersomnial accesses, talking-defects, staggering, headache, etc. faded away and the temperature and EEG-recordings normalized.

Third case: Patient D. K. D., age 22 years, CR N. 15895/79. The disease began in 1974, when after a febrile period and illness, the patient became sleepy, weak, with accesses of hypersomnia up to 10 days, during which the patient was forcibly awoken to eat. The accesses for such a long sleep were provoked by alcohol and influenza-like illnesses. Having a normal somatic and neurological status, also laboratory data, the patient was tested serologically for toxoplasmosis in order to diagnose his disease additionally. The results were: RBC (reaction binding of complement) 1:160, RIF 1:40 and RPHA (reaction passive haemagglutination) 1:10. After the applied specific treatment the hypersomnic accesses faded away. The ambulatory treatment and constant EEG-control did not establish until now (11/2 year later) any recidivations of PH; serological results normalized too.

Our study allows the following conclusions:

According to the clinical characteristics of the first 2 cases there is a coincidence of various "psychogenic" factors in the anaemnesis, accompanied by the corresponding paroxysmal disorders of awaken and sleepy states after a comfort or higher temperature. The detailed neurological investigation allows to exclude the local neurological symptoms — disfunction of the diencephalic structures caused by an eventual organic process. In spite of the present vegetative finding in the second case, accompanying the PH-crisis, we presume that it would be more precise to attribute it to the hysterical hypersomnial crisis. The fact that the treatment with physiotherapeutical, psychotherapeutical and sedative preparations and methods had certain effect on these conditions, proves the diagnosis.

The clinical characteristics of the third patient shows the undoubtful organic nature of former toxoplasmatic encephalitis with the characteristic serological deviations. The type of the somnolent accesses, their duration, complex with emotional weakness, no initiativeness, and finally the result of the specific treatment, are all enough reasons to diagnose this case as PH with toxoplasmosis.

Although there is a certain difference between the clinical manifestations of the functional and organic hypersomnia, the differentiative-diagnostical analysis allows the following practical criterion for a better clinical-diagnostical experience of these conditions.

Therefore, the precise anaemnesis, asthenical background, expressed negative emotions, neurological status, state of the vegetative and animal nervous system, are considered as the first criterion to identify the functional and organic-originated PH-accesses.

Second important sign is the character of the hysterical syncop, emotional-affective picture, muscular tone, duration of the state, quick awakening with strong irritation and the state of pelvic reservoirs.

EEG-recordings during the inter-accesses-periods did not show deviations proving certain disorders of the sleepless periods and their level. During
an access of hysterical PH-crisis together with the prevailing alpha-like deviations in the posterior regions of the brain we registered a slower rhythm (1—1.5 d/sec) and an increase of the amplitudes of the encephal biopotentials with a tendency to a large-scale synchronization. Similar deviations were not established by some other authors: A. M. Vein, L. P. Latash (1963), J. Mezan et al. (1964).


The cited clinical-EEG correlations are in unison with the results of A. M. Vein (1966) and formulate the relative dependence between BEA and PH-conditions.

The clinical-EEG correlations against the background of the leading neurological syndrome suggest that the functional PH-accesses have to be more precisely diagnosed by using the objective criterion with every individual patient showing a disturbed sleep. All that witnesses for the numerous physiological and pathogenetical mechanisms supporting the degree and level of sleepless and sleepy states of the organism.

REFERENCES


К КЛИНИЧЕСКОЙ ХАРАКТЕРИСТИКЕ ПЕРИОДИЧЕСКОЙ ГИПЕРСОМНИИ

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РЕЗЮМЕ

Авторами анализируются клинические особенности и дифференциально-диагностические критерии истерических и органически вызванных гиперсомнических пароксизмов. Оценка объективного состояния, длительность сномоподобных кризисов и клинико-ЭЭГ корреляции во время приступов и в периоды между ними предлагают возможности, объективизирующие этиопатогенез и точный диагноз. Они способствуют выяснению патофизиологических механизмов, поддерживающих уровень бодрствования и сна.