

Comment

The current issue of "Postępy Nauk Medycznych" is entirely devoted to the contemporary problems of neurology. This is an area of medicine, in which unusually rapid changes are taking place, in particular related to the progress of civilization and resulting extension of human life expectation, which in turn causes a progressive aging of European societies. The epidemiological forecasts suggest that in 2030 the number of persons over 50 will double.

The importance of neurology for the society is demonstrated by the fact that May 2013 has been declared European Month of Brain by the European Brain Council (EBC) together with the European Federation of Neurological Associations (EFNA).

The majority of articles published in this issue have been prepared by the members of the Department of Neurology and Epileptology.

Brain strokes create a significant therapeutical challenge due to, among others, their social consequences. The basic task for the neurologists is the reduction of death toll and disabilities after the brain stroke. An early identification of possible complication in such patients is important for the application of an optimal therapeutical treatment. Article is devoted to the detection of possible cardiac complications (1).

Cognitive impairments turn to be an ever-growing problem for neurologists. The next article is devoted to the assessment of risk concerning mild cognitive impairments (2).

The topic of the next study was to investigate the dopamine transporter (DAT) expression in peripheral blood lymphocytes of Parkinson's disease patients as compared to controls and impact of various parameters. Peripheral blood lymphocytes provide a recognized model to study the changes of neurotransmitter-receptor systems (3).

The next report focuses on to the problems of identification and qualification of the paroxysmal EEG patterns as seizure-type changes – in relation to the modern terminology and in the light of contemporary possibilities, resulting from the methods of digital recording and analyzing of EEG records (4).

The next paper (5) presents a report of a patient with slowly progressing atypical parkinsonism. The patient fulfills the criteria of primary progressive freezing gait (PPFG) – a very rarely found neurodegenerative disorder.

There was also presented a report (6) of four cases of patients with acute focal neurological symptoms, without ischemic focus in routine computed tomography (CT), who underwent perfusion computed tomography (PCT) of the head and electroencephalography within 12 hour after symptom's onset. Patients have finally been diagnosed with ischemic stroke with secondary hemorrhage (case 1), postictal Todd's paresis (case 2), hemiparesis in course of seizure (case 3) and ischemic stroke with concomitant nonconvulsive status epilepticus (case 4). PCT is used for acute stroke evaluation, single reports suggest however, that it may also falsely identify patients with neurological deficits related to seizures.

The subsequent papers include:

The use of positron emission tomography (PET) in the diagnosis of the localization of an epileptic focus, especially in the case of focal and drug-resistant seizures has been discussed (7). The research results from various research centers indicate the purposeful use of multidirectional complementary diagnostic procedure methods (computer tomography, magnetic resonance imaging, SPECT, PET).

The significance of autonomic nervous system disturbances in symptomatology and pathogenesis of the seizures, as well as their role in the pathogenesis of sudden unexpected death in epilepsy (SUDEP) is the subject of the next paper concerning this important matter (8).

Psychogenic movement disorders (PMDs) is a difficult subject. PMDs include loss of motor ability, as well as abnormal motor movements resembling organic tremor, dystonia, chorea, tics etc. PMDs is diagnosed based upon the exclusion of other diseases (9).

A very rapid progress in therapy of multiple sclerosis is currently observed (10). It is caused by a series of new discoveries related to the pathomechanism of disease, as well as of the elaboration of new biological drugs modifying the pathological activity of immunological system.

Examination of cerebrospinal fluid remains, despite the development of neuroimaging techniques, an essential element of neurological diagnostics. This review (11) presents information on the methods for analysis of the cerebrospinal fluid, the interpretation of the results and their usefulness in resolving diagnostic difficulties.

Prof. Urszula Fiszer, MD, PhD

BIBLIOGRAPHY

1. Maliszewska M, Fiszer U, Palasik W et al.: Elevated troponin I level: a predictor of poor prognosis after ischemic stroke. *Post N Med* 2013; 10: 667-672.
2. Barczak A, Gabryelewicz T, Wasiak B et al.: Clinical Dementia Rating Scale (CDR) and dementia risk in the Mild Cognitive Impairment patients. *Post N Med* 2013; 10: 673-677.
3. Fiszer U, Piaścik-Gromada M, Jethon M et al.: Dopamine transporter immunoreactivity in peripheral blood lymphocytes in Parkinson's disease. *Post N Med* 2013; 10: 678-682.
4. Sobieszek A: Wzory zapisu EEG o charakterze napadowym. *Post N Med* 2013; 10: 683-690.
5. Michałowska M: Atypical parkinsonian syndrome – primary progressive freezing gait? Case report. *Post N Med* 2013; 10: 691-693.
6. Kubiak-Balcerewicz K, Fiszer U, Nagańska E et al.: Perfusion computed tomography in the diagnosis of acute focal neurological symptoms – a report of four cases. *Post N Med* 2013; 10: 694-700.
7. Nagańska E: Znaczenie badania pozytonowej tomografii emisyjnej w diagnostyce padaczki. *Post N Med* 2013; 10: 701-705.
8. Bogucki P: Znaczenie zaburzeń układu autonomicznego w symptomatologii i patogenezie napadów padaczkowych. *Post N Med* 2013; 10: 706-709.
9. Leńska-Mięciek M: Psychogenne zaburzenia ruchowe. *Post N Med* 2013; 10: 710-714.
10. Palasik W: Leki biologicznie w leczeniu stwardnienia rozsianego. Przegląd aktualnych osiągnięć. *Post N Med* 2013; 10: 715-719.
11. Chochoł P, Fiszer U: Ocena parametrów płynu mózgowo-rdzeniowego w diagnostyce chorób neurologicznych. *Post N Med* 2013; 10: 720-725.