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Brain Neoplasms with Development Similar to Transient Brain Ischaemia

Nowotwory mózgu o rozwoju przypominającym przemijające niedokrwienie mózgu

Diagnostics of brain tomours still remains a serious problem in neurologist's career. Difficulties in proper diagnosing refer mainly to endocranial tumours with atypical clinical course. Frequency of brain tumours' vascular manifestation is assessed as 1—4%, and in most cases it is the kind of manifestation which corresponds with intracerebral bleedings and more seldom with ischaemic strokes. Reports on brain tumours with developments similar to transient brain ischaemia (1, 2, 3, 4) are published occasionally.

In Neurology Clinic of the Medical Academy in Lublin, we conducted observation of two patients with brain tumours (one metastatic and the other one — primary), where the former as well as the latter case were treated as cerebral circulation failures at their initial stage. Application of typical vasoactive treatment brought about temporary regression of symptoms.

DESCRIPTION OF THE CASES

Case 1. Patient A. Z., a 66-year-old pensioner. The ambulatory patient, seeking neurologist's help because of sudden occurrence of balance disturbances and nausea which subsided after-three days of taking vasoactive drugs by the patient. Ailments of exactly the same nature reappeared one month later. More intensive character of the ailments resulted in patient's hospitalization in Neurology Clinic. Physical examination revealed no pathological changes. On neurological examination, the only abnormal finding was uncertain Romberg's trial. The patient was gradually getting worse during the hospitalization period, his vertigo intensified, bradypsychkinesia occurred, the patient became unable to walk. Wide range of conducted accessory investigations gave correct results. CT scan of the brain revealed: numerous abnormal foci characterized by differentiated density rate. CT scan advocated metastatic character of the neoplasm. Although wider range of accessory investigations was conducted, primary neoplastic focus was not found. The patient died. Autopsy was not performed.

Case 2. Patient W. H., 51 years of age, admitted to Neurology Clinic because of severe vertigo, nausea and slight headaches. At the time of admittance, the patient's general condition was good, he was able to communicate and exhibited correct orientation. He complained of dizziness, nausea and headaches in the occipital area. Arterial RR of the blood was 160/100. Neurological examination revealed brachybasic gait and uncertain Romberg's trial. The fundus of the eye was correct. Laboratory tests were normal. Radiological examination of the cervical spine revealed discopathic features at the level C_5-C_6. In the course of the treatment the patient was administered hypotensive, vasoactive and antiemetic drugs. In two weeks' hospitalization period, entire normalization of the patient's neurological state and complete subsidence of symptoms were achieved. Arterial hypertension, degenerative-productive changes in the cervical spine, discopathy at the level C_5-C_6 and recurrent transient ischaemia of the subtentorial structures of the brain were diagnosed. After discharge from hospital, the patient received spa treatment in the health resort Iwonicz Zdrój. During his stay there, the patient's general condition was good. A few days after his return home, orientation disturbances and dysphasia corresponding with dyskinesis occurred in the patient. He complained of headaches and was unable to control the sphincter muscles. Because of the symptoms, the patient was again admitted to the clinic. At the time of admittance, he was markedly psychomotorically slow, unable to give information concerning the date, his age or address. Features of motoric dysphasia with no other symptoms of NS focal lesions present, were found. RR was 160/95, the pulse — 100/min. Oedema of the optic discs was found in the fundus of the eye. Antioedemal treatment was applied but the patient was still getting worse, became drowsy, the Babiński's symptom appeared bilaterally. Extravasations appeared in the fundus of the eye. CT examination revealed the presence of an extensive tumour (probably a glioma) in the left frontal lobe, overgrowing through the corpus callosum to the right frontal lobe. Because of the extensiveness of the overgrowth process, the consulting neurosurgeon rejected the possibility of operation. The patient was still feeling worse. He died. Autopsy was not performed.

DISCUSSION

It should be noted that in both presented cases ailments suggesting cerebral circulation failure were present. In neither of the patients symptoms of the brain tumour were diagnosed at first, only later occurrence of symptoms typical of endocranial overgrowth process made it possible to state the appropriate diagnosis. It is hard to say whether the symptoms present at the initial stage of the disease were caused by neoplastic process, or whether it was a transient brain circulation failure. Arterial hypertension load together with the presence of

discopathy of the cervical spine in the latter patient do not allow to exclude coexistence of primary haemodynamic disturbances in vertebral-basal vessels. It is known, however, that neoplasms of the brain in their initial stage of development may also cause transient diminished blood flow via defined parts of the brain and their temporary dysfunction. These disturbances may result from a brain tumour's mechanical pressing down on the vessels or they may be a consequence of increased endocranial pressure. The cases presented above also demonstrate how one disease process may camouflage another one, which can be much more dangerous for patient's health or life. This has a great practical meaning because early detection of a brain tumour significantly increases the chances of appropriate treatment.

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STRESZCZENIE

Przedstawiono chorych z nowotworami mózgu (1 przerzutowy, 1 pierwotny), które w początkowym rozwoju były traktowane jako przemijające niedokrwienie mózgu, a zastosowanie typowego leczenia naczynioaktywnego spowodowało czasowe ustąpienie objawów chorobowych. Zwrócono uwagę na możliwość powodowania przez nowotwory mózgu w początkowym okresie rozwoju przemijającego zmniejszenia przepływu krwi przez określone części mózgu i okresową ich dysfunkcję.