

various functional properties of the vascular system is necessary for adequate diagnostics of disbalanced vascular system as on preclinical patients' examination and during treatment of the cerebral dysgemia.

Presence of a clinical picture of stroke says for expressed disbalance in functioning not only of the blood supply system but also of the blood outflow system in a certain patient that comes into a level of uncontrolled chaos during stroke. Very in these situations patient's vascular system requires constant monitoring of many hemodynamic parameters for the purpose of well-timed dynamic indication and adequate reaction for sanogenic correction of detected changes. Assessment program of quality of the performed medical care during neurorehabilitating courses in Medical Center "Istyna" proved increasing of quality of the performed medical care by criteria of decreasing of psychoneurological deficiency by 40-45% on the background of restoration of scarce and disbalanced blood supply in the cerebral reservoir by 50-60%. Our experience of examination of the vascular system according to logic of functioning of the living system generally and cardiovascular system in particular, shows the urgent necessity in changing priorities in investigation stroke patients – to leave ordinary verification of atherosclerotic plaques, thrombosis in the lumen of vessels. Only analytical approach to multisided investigation of various functions of blood supply, which is based on knowledge of hydrohemodynamic laws, gives essential results in decreasing of number of cardiovascular and cerebrovascular diseases.

A. DOWŻENKO, W. CZEPIEL

### *Carotid stenting in acute stroke. Reopening of Left Internal Carotid Artery. One case report*

78-years old man with history of diabetes mellitus and coronary heart disease was admitted to hospital because of sudden paresis of right limbs and aphasia. In anamnesis several episodes of transient paresis of the right upper limb in the previous 2 days. On admission 15 points in NIHSS, on CT scan no intracranial haemorrhage, no ischemic lesion related to stroke. Doppler examination - suspicion of Left Internal Carotid Artery (LICA) occlusion and collateral circulation through anterior communicans artery from right to left site. Patient received intravenous Actilyse (SITS - MOST). Neurological examination and doppler examination after intravenous thrombolysis without improvement. Carotid angiography revealed total occlusion of LICA. The occlusion of the LICA was reopened by soft catheter. Nitinol stent was implanted with good result. Patient received antiplatelet treatment Aspirin and Clopidogrel). Control CT scan after 24 hours showed 2 hypodensic areas in the left hemisphere. During hospitalization neurological state improved – patient began to walk with help. Control CT scan after 6 days revealed hemorrhagic transformation of ischemic lesion without clinical deterioration (antiplatelet treatment was continued). After 11 days of hospitalization patient was discharged with improvement (8 points NIHSS) in good general condition and was admitted to rehabilitation department.

T. MENDEL<sup>1</sup>, E. BERTRAND<sup>2</sup>, W. CZEPIEL<sup>1</sup>, T. WIERZBA-BOBROWICZ<sup>2</sup>

### *Complications of severe cerebral amyloid angiopathy in the course of dementia with Lewy bodies. A clinical and neuropathological case report*

<sup>1</sup>Second Department of Neurology, Institute of Psychiatry and Neurology, Warsaw, Poland

<sup>2</sup>Department of Neuropathology, Institute of Psychiatry and Neurology, Warsaw, Poland.

Cerebral amyloid angiopathy (CAA) is a clinico-pathological condition caused by the deposition of amyloid in the walls of leptomeningeal and brain parenchymal vessels. CAA has a fundamental aspect of pathology of many disorders causing dementia. Brain parenchymal hemorrhage and/or necrosis is common in this condition, but focal pure subarachnoid hemorrhage is rare.

Authors report a case of 67-year-old male who was admitted to the Second Department of Neurology in the Institute of Psychiatry and Neurology. He suffered on dementia from 4 months and was treated by risperidone and donepezil. He was admitted due to vertigo and slight left hand paresis. On CT scan hemorrhagic infarct in the left frontal lobe and multiple ischemic lesions in frontal, temporal and parietal lobes were revealed. Recurrent subarachnoid hemorrhage, intracerebral hemorrhagic and ischemic lesions were observed on repeated CT scans, allowed to diagnose of CAA clinically. He deceased

of severe CAA complications in the course of dementia with Lewy bodies (DLB). Final diagnosis of DLB was made postmortem on the basis of typical histological changes in association with a progressive intellectual decline in a clinical manifestation of disease. Focal subarachnoid hemorrhage and many hemorrhagic as well as ischemic cerebral lesions were seen on brain autopsy. Microscopic findings, demonstrated immunohistochemically, were typical of DLB with concomitant severe CAA. Severe CAA was a cause of many focal subarachnoid and intracerebral hemorrhages as well as brain ischemic necroses, which led to lethal outcome.

A. ŚLIWIŃSKA<sup>1</sup>, J. JEŃDRZEJEWSKA J<sup>1</sup>, M. BUKSIŃSKA-LISIK<sup>2</sup>, W. DYK<sup>4</sup>, K. KOTLIŃSKI<sup>4</sup>,  
M. JASIŃSKA<sup>5</sup>, A. CZŁONKOWSKA<sup>1,3</sup>

### *Sewing needle as a cause of haemopericardium: unusual complication after stroke treatment with i.v. rtPa*

<sup>1</sup>Second Department of Neurology, Institute of Psychiatry and Neurology, Warszawa, Poland

<sup>2</sup>Department of Cardiology, Central Railway Hospital, Warszawa-Międzylesie, Poland

<sup>3</sup>Department of Experimental and Clinical Pharmacology, Medical University, Warszawa, Poland

<sup>4</sup>1st Department of Cardiosurgery, Institute of Cardiology, Warszawa, Poland

<sup>5</sup>Department of Anesthesiology, Institute of Cardiology, Warszawa, Poland

#### **Case report**

A 68-year-old man was admitted to hospital 2 hours after the stroke onset and received i.v. rtPa treatment. About 2,5 hours after termination of rtPa infusion, suddenly symptoms of cardiogenic shock appeared. ECG and cardiac enzymes levels showed no sign of acute myocardial infarction. Dopamine infusion and fluids were administered and the patient's condition got gradually better and remained stable. Transthoracic echocardiography showed pericardial and left pleural effusion, concentric left ventricular hypertrophy (2,0 cm) with preserved systolic function and catheter-like, metallic object in the left ventricle.

CT chest scan confirmed the presence of linear foreign body of 66 mm length, localized in septum and protruding to left ventricle of the heart. No marks of stabbing or other chest injuries were detected, the patient denied swallowing a needle. He was operated on in Cardiosurgical Department with the use of ECC (extracorporeal circulation) and a 70 mm sewing needle was successfully removed from the left ventricle. The surgeons found the ulceration of back wall of pericardium, as an evidence of passing the needle from oesophagus.

#### **Discussion**

Just few cases of sewing needle in the heart have been reported in the medical literature. Haemopericardium is a very rare complication of thrombolytic treatment of stroke. We have found 4 cases of cardiac tamponade after rt-Pa treatment of stroke, but probably caused by subacute undetected myocardial infarction. To our best knowledge, the presented case is the first one with such

M. KRAWCZYK<sup>1</sup>, M. SYCZEWSKA<sup>2</sup>

### *Objective measurement of post-stroke motor deficit. It's goals and perspectives. Pilot study*

<sup>1</sup>Second Department of Neurology, Institute of Psychiatry and Neurology, Warsaw, Poland, <sup>2</sup>Department of Pediatric Rehabilitation, the Children's Memorial Health Inst., Warsaw, Poland

Clinical evaluation of stroke patients is very seldom to comprise all problems because of vast range and variability of motor disorders after cerebral vascular incident (Cva). Measurement of motor abilities progress which is based on observation often simplifies distinct changes and it doesn't distinguish subtle differences. In this circumstances verifying of treatment methods is limited only for obvious and typical pathomechanisms.