

## POSTER PRESENTATIONS – ABSTRACTS

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### *Middle cerebral arteries blood flow monitoring with the use of transcranial doppler ultrasonography in hypertensive patients without significant stenosis of extracranial arteries, in acute phase of ischemic stroke*

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**Background:** sudden and rapid lowering of blood pressure in patients with ischemic stroke can cause regional blood flow decrease and increase of ischemic area. The aim of study: the current project was aimed at elucidating whether blood pressure decrease in hypertensive patients with ischemic stroke, not characterized by hemodynamically significant stenosis in extracranial arteries and proximal segments of intracranial arteries may lead to circulation disturbances in middle cerebral arteries (MCAs) as visualized by transcranial Doppler ultrasound (TCD) and whether the cerebral blood flow disturbances resulting from blood pressure changes influence the risk of neurological deterioration in those patients.

**Material and methods:** the study was done on 62 patients of 45 - 86 years old, with arterial hypertension, in the acute phase of the first ever ischemic stroke. Systolic (SBP), diastolic (DBP) and mean (MBP) blood pressure values were analyzed. The level of neurological deficit was measured with the use of NIHSS (National Institutes of Health Stroke Scale). We have calculated the following parameters: the mean velocity (Vmean), Gosling's pulsatility index (PI), Pourcelot's resistance index (RI), aMCA/uMCA vmean index (affectedMCA/unaffectedMCA vmean index).

**Results:** A significant decrease of SBP, DBP and MBP occurred between the first and second day after stroke. No correlation between a decrease of arterial pressure, MCAs blood flow parameters and neurological deficit was observed.

**Conclusions:** in patients with arterial hypertension, without significant stenosis of carotid arteries and proximal parts of MCAs, in the acute phase of ischemic stroke: 1/ decrease of blood pressure doesn't cause significant disturbances of blood flow in MCAs, assessed with the use of TCD, 2/ stable circulation in proximal part of MCAs seems to be the one of the factors which prevent the increase of neurological deficit in the acute phase of ischemic stroke.

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### *Haemorrhagic transformation of acute ischaemic stroke in the patients treated with IV rt-Pa*

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**Background:** Haemorrhagic transformation (HT) is one of the most serious complications of the rt-Pa therapy.

**Purpose:** The purpose of this study was to overview the group of the patients with HT after rt-Pa therapy in order to find risk factors of this complication.

**Material and methods:** In a period from September 2006 to December 2007 in stroke unit in Sandomierz we treated 40 patients with rt-Pa. In this group 10 patients had haemorrhage. We analysed different factors: sex, age, blood pressure,