

**113****Transcranial Colour-Coded Duplex (TCCD) sonography as a guiding light in the darkness of catastrophic acute stroke**Malferrari G<sup>1</sup>, Zedde M<sup>2</sup>, De Berti G<sup>3</sup>, Tusini N<sup>4</sup>, Casali G<sup>4</sup>, Vecchiati E<sup>4</sup><sup>1</sup>Neurology - Stroke Unit, Arcispedale Santa Maria Nuova, Italy<sup>2</sup>Emergency Medicine, Arcispedale Santa Maria Nuova, Italy<sup>3</sup>Neuroradiology, Arcispedale Santa Maria Nuova, Italy<sup>4</sup>Vascular Surgery, Arcispedale Santa Maria Nuova, Italy

The only causative therapy for acute stroke now available is thrombolysis with rtPA, both intravenous and intraarterial. But not all patients with stroke are suitable and not all patients have the same beneficial results. This is because acute stroke patients have the same clinical features although several different patterns of vessel occlusion. The identification of the presence and site of vascular lesion in the acute phase can help to choose the best strategy of treatment for each patient. We visited a 53 years old healthy man, who in the first night of 2007 had abruptly right emiplegia, aphasia and agitation. We performed at two hours from the onset Color Doppler sonography of Supra Aortic trunks and TCCD and we found total occlusion of left internal carotid artery from its origin and occlusion of the left MCA and ACA. This thrombotic burden, soon identified by non-invasive ultrasound tools, gave him a worse prognosis quoad vitam and obviously it was not thinkable a successful reperfusion by intravenous thrombolysis. Then we choose the intravascular approach in order to restore patency at least of MCA for the rescue of penumbra. Therefore our neuroradiologist performed a selective arteriography of left internal carotid artery and crossed the clot by a guide toward M2 MCA, that was demonstrated patent at locale contrast injection. This diagnostic phase confirmed neurosonological report and then therapeutical phase was begun with microboli of urokinase directly into MCA clot. Early we achieved reperfusion of A1 ACA and no effect on M1 middle cerebral artery although multiple microboli of urokinase into M1 thombus. TC of the head one hour after the end of the procedure was significant only for a mild blood-contrast collection into the basal ganglia of the left hemisphere. Neurosonological control at ten hours revealed persistent occlusion of the left ICA and MCA but control at 24 hours shown patent left MCA with persistent occlusion of ICA.

**114****A proposal of a dedicated pathway for management of patients with TIA**Malferrari G<sup>1</sup>, Dallari A<sup>1</sup>, Nucera A<sup>1</sup>, Zedde M<sup>2</sup><sup>1</sup>Neurology Stroke Unit, Arcispedale Santa Maria Nuova, Italy<sup>2</sup>Emergency Medicine, Arcispedale Santa Maria Nuova, Italy

The classic definition of TIA is a sudden, focal neurological deficit that lasts for less than 24 hours and the differentiation from stroke is only a time matter on the basis of an arbitrary criterion for the duration of symptoms, recently changed. Both health professionals and the general population consider TIAs as a benign events, whereas the stroke is regarded as a serious condition. This view has been demonstrated to be incorrect, because TIA and minor stroke share the same risk profile and the same prognosis, identifying the same subpopulation of patients at higher risk of early recurrence. However, TIAs offer a greater opportunity to secondary prevention of cerebrovascular events before the presence of severe disability. After a first TIA, 10 to 20 percent of patients have a stroke in the next 90 days, and in 50 percent of these patients, the stroke occurs in the first 24 to 48 hours after the TIA. In our institution we are proposing a multidisciplinary integrated pathway of emergency management of TIA patients based on the ABCD score groups of recurrence risk. Particularly patients presenting with TIAs have access to neurological evaluation and subsequent diagnostic and therapeutical tools, mainly neurosonological examination, with waiting time shortened and quantified on the basis of the ABCD score. This project has a relevant phase of health education toward the general population and physicians about pathophysiology, acknowledgment and risk of TIAs in order to achieve a prompt diagnostic suspicion and an early sending of these patients to medical evaluation. This pathway is expected to reduce the recurrence of cerebrovascular events in TIA patients by timely diagnosis and vascular management (mainly by neurosonological data) and selection of proper treatment strategies. This will be tested by comparing the outcome of TIA patients managed within this pathway in our institution with the outcome of those managed before activating this project.