

### (P3) Carotid T occlusion stroke. A proposal of a multidisciplinary microvascular study

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**Background:** It has well known from the recent years that the identification of the occlusive pattern in the acute phase of stroke, as can be made by TCCS, gives prognostic information. One of the worse prognoses is associated with carotid T-type occlusion and the response to recanalization strategies is very poor.

**Methods:** In the population admitted to Stroke Unit, we evaluated the occlusive pattern in the acute phase by ultrasound examination of SupraAortic Trunks and TCCS with UCA for perfusional examination. T occlusion was diagnoses according to the literature criteria and in a few cases the neurosonological diagnosis was confirmed by neuroradiological techniques, like as CTA or DSA. In a very small sample of these patients also perfusional CT was performed and data on main parameters were compared between perfusional ultrasound study and neuroradiological study.

**Results:** The treatment of this subgroup is not a goal of our work, but with conventional treatment only two patients achieved a complete recanalization at one hour from the treatment. Perfusional parameters were more markedly impaired in the affected hemisphere in all patients who died than in survivors with both techniques and no recanalization was found in the former unless a partial and late reperfusion.

**Conclusion:** TCCS in the acute phase of stroke can help to predict prognosis and the perfusional data can improve the reliability of these information, but the comparison with other perfusional techniques can be useful in order to define the role of this tool and therefore we propose to follow this way for the future.

### (P4) The correlation between carotid artery atherosclerotic ultraonographic findings with middle cerebral artery infarction subtype and localization

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**Aim.** To evaluate atherosclerotic changes in carotid arteries (CA), the clinical competence of ultrasonografic (US) evaluation data for detecting Middle Cerebral Artery (MCA) infarction subtype and main pathogenetic factors.

**Material and Methods.** US examinations were performed on 585 patients of the Stroke Unit, comprised of 428 with atherothrombotic cerebral infarctions (ATCI) and 157 with cardioembolic cerebral infarctions (CECI). The carotid artery I-M thickness, plaque stability, artery stenosis and occlusion US finding criteria were evaluated and specified with cerebral infarction (CI) ipsilateral, heterolateral or bilateral localization. Examinations were performed with PHILIPS IU 22 ultrasonography equipment.

**Results.** I-M thickening as the only sign was 11,5 % more often for patients with CECI than ATCI, but stable plaques with stenosis < 50% were found equally often for both CI subtypes -31% and 32 %. CA stenosis >50% ATCI was found 10% more often (p<0,001) than CECI and was detected in 13,8 % of ATCI patients. Occlusions were 10% in ATCI and 8,9 % in CECI, but unstable plaques for ATCI and CECI groups did not differ significantly - 26,6% and 24,8%. For both CI subtypes US atherosclerotic data were more often bilateral -63,2% ATCI and 58,6% CECI. US findings in other ATCI cases were equally often ipsi- and heterolateral compared to the localization of CI, but only >50 % were ipsilateral for CECI stenosis.

**Conclusion.** The carotid artery atherosclerotic US findings show the systemic nature of atherosclerosis for ACM stroke patients but are not sufficient as diagnostic criteria for ATCI from CECI and cannot be used with certainty for the determination of main pathogenetic factors.

### (P5) Urgent assessment of Transient Ischemic Attacks (TIA): the "Day-TIA"- Italian pilot study

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**Background.** TIA precedes about 15% of strokes and represents a special opportunity for prevention. Its management in clinical practice is often suboptimal. We aims to evaluate the effects (stroke rates compared to expected ones on ABCD2 score risk levels) of urgent assessment of patients with presumed TIAs in the setting of a neurovascular unit.

**Methods.** We followed a management pathway according to the risk score and the timing of TIA (index event) and studied prospectively a cohort of consecutive patients presenting with TIA to the emergency department and therefore sent to neurologist's attention. All patients underwent to protocol evaluation that included clinical neurological assessment, brain imaging with unenhanced CT,; duplex ultrasonography