115 When time onset of stroke is uncertain: combined TCCD and perfusion CT approach for patient selection to reperfusion therapy

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Our patient is a young woman 29 years old, with a past medical history significant for a lymphoblastic leukemia at the age of four years, treated with chemo- and radiotherapy, and a hipokinetic cardiomyopathy caused by adriamycin, for which she is in a heart transplant list. She was found by her mother in the bathroom with aphasia and right hemiplegia; time of symptom onset is uncertain and the patient was not able to tell it. The CT scan of head showed an acute lesion in the deep left middle cerebral artery territory and effacement of convexity sulci. In the Stroke Unit of the Arcispedale Santa Maria Nuova of Reggio Emilia, we performed an ultrasound examination of the supra aortic trunks and of the cerebral vessels (by Transcranial Colour Coded Duplex Sonography) and we found the following data: on the right common carotid artery at the bifurcation an abnormal flow spectrum with an increased systo-diastolic ratio, on the right internal carotid artery and abnormal reflux flow pattern with high resistance flow and distal accelerations, at the right vertebral artery omogenously increased flow velocity, at the left internal carotid artery stump flow, the left vertebral artery change of the flow spectrum from one intervertebral space to another. This abnormal pattern was completed by TCCD findings of widespread vasodilation and focal flow accelerations at the carotid siphon, at the communicant vessels and in the posterior circulation. The diagnosis of multiple vessel dissection was confirmed by magnetic resonance angiography and by digital subtraction angiography. CT scan of the head demonstrated a small ischemic lesion in the left frontal lobe. Prompt anticoagulation was instituted, and the patient had gradual and complete resolution of symptoms within about twenty days. Both US and MRA at 30 dd showed a markedly improved vascular condition and a trend toward aneurisms.

116 Odontalgia as a onset symptom of a dramatic spontaneous cerebroaferrent vessels dissection

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Spontaneous dissection of the extracranial carotid and vertebral artery is an increasingly diagnosed cause of stroke, especially in young adults. Dissection of multiple extracranial vessels is extremely uncommon and usually associated at a dramatic neurological deficit. We are presenting the case of a young man, 42 years old, with a past history of arterial hypertension on pharmacological treatment, who complained from about one month onset of left inferior odontalgia, subsequent aspecific headache and tinnitus at the right side of the head. In this phase a CT scan of the head was normal. One month after the patient went to our observation for the abrupt onset of mildest right faciobrachial deficit. At that point we performed an ultrasound examination of the supra aortic trunks and of the cerebral vessels (by Transcranial Colour Coded Duplex Sonography) and we found the following data: on the right common carotid artery at the bifurcation an abnormal flow spectrum with an increased systo-diastolic ratio, on the right internal carotid artery and abnormal reflux flow pattern with high resistance flow and distal accelerations, at the right vertebral artery omogenously increased flow velocity, at the left internal carotid artery stump flow, at the left vertebral artery change of the flow spectrum from one intervertebral space to another. This abnormal pattern was completed by TCCD findings of widespread vasodilation and focal flow accelerations at the carotid siphon, at the communicant vessels and in the posterior circulation. The diagnosis of multiple vessel dissection was confirmed by magnetic resonance angiography and by digital subtraction angiography. CT scan of the head demonstrated a small ischemic lesion in the left frontal lobe. Prompt anticoagulation was instituted, and the patient had gradual and complete resolution of symptoms within about twenty days. Both US and MRA at 30 dd showed a markedly improved vascular condition and a trend toward aneurisms.