THROMBOCYTOPENIC STROKE PATIENT TREATED WITH INTRAVENOUS THROMBOLYSIS

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Case report. We report the case of a 63-year-old woman admitted to our Department due to sudden onset aphasia and right VII cranial nerve central palsy. In addition, the patient reported a light chest pain begun a few days before emergency department (ED) admission. ED neurological examination confirmed a primarily expressive aphasia and a mild right upper limb weakness (NIHSS: 9). Patient previous medical history was unremarkable, except for a recent ginecological evaluation due to a newly onset metrorrhagia. An urgent CT scan didn't reveal any acute brain lesion. Blood test revealed an elevated troponin value and thrombocytopenia (71.000/mm3). Electrocardiographic changes consistent with an antero-lateral myocardial ischemia were confirmed at a subsequent transthoracic echocardiogram, showing a small apex myocardial infarction without any evidence of left ventricular thrombi. A diagnosis of subacute myocardial infarction was confirmed by the consultant cardiologist who didn't indicate as mandatory neither an urgent coronarographic study, nor any urgent specific treatment. Despite the formal contraindication consituted by the low platelet count intravenous thrombolysis was administered (onset-to-needle time was approx. 210 minutes). Clinical improvement was observed immediately after fibrinolytic therapy (NIHSS: 5) and became much more apparent the next day. A CT scan performed 24 hours after thrombolytic therapy demonstrated a recent right occipital ischemic stroke along with bilateral subcentimetric haemorragic spots. Considered these neuroradiological findings, initiation of antithrombotic therapy was postponed. Patient's neurological condition got significantly worse on day two and a subsequent MRI scan showed bilateral sovra- and infratentorial ischemic lesions with a scattered distribution associated with partial occlusion of the left middle cerebral artery and multiple minute intraparenchimal bleedings (FiG. 1). Antithrombotic therapy and fondaparinux 2,5 mg daily were initiated, despite continuous methrorragia.



Further diagnostic evaluation revealed a suspected ovarian malignancy and multiple undiagnosed splenic and renal infarctions (FIG. 2). A paraneoplastic thrombofilic status was postulated as responsible of the repeated cerebral, myocardial and sistemic thrombotic events. Patient's neurological condition remained stable in the next few days and slightly improved within the next weeks. A month after hospitalization surgical removal of the pelvic lesion was performed and histopathological findings were consistent with a clear cell ovarian carcinoma.

FIG. 1. Brain MRI scan



FIG. 2. Total body CT scan

Conclusions. In our opinion, what's worth considering about the present case report, other than the catastrophic rapidly evolving presentation, is the appropriateness of treating thrombocytopenic stroke patients with intravenous thrombolysis. Clearly no strong evidence is available to extend thrombolytic indication to this subgroup of stroke patients (which remained excluded from randomization in controlled trials) but we argue if such a contraindication may be critically discussed in selected cases. Moreover, discussion is arising concerning the real need of waiting for the results of blood exams to start thrombolytic therapy, considered that the low likelihood of identifying a thrombocytopenic condition by doing so as to be balanced with the very likely delaying of fibrinolytic treatment.

Reference.

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