

L 010

Affection of central nervous system in MELAS syndrome

O. Smorodska, I. Shandyba, P. Bileckiy, R. Moskalenko, A. Loboda, A. Romaniuk

Sumy State University, Sumy, Ukraine

Introduction: The problem of acute cerebrovascular accident (ACVA) has enormous socio-economic importance due to its significant prevalence. Since the ACVA have clinical and pathogenetic polymorphism, problem of differential diagnosis of diseases that mimic their clinic raised up. This problem was illustrated by the clinical case we present. Difficulty of differential diagnostic illustrated by case with patient who initially hospitalized with a diagnosis of ACVA, but later during dynamic monitoring and additional examinations diagnosis of MELAS syndrome was found. **Objectives:** differential diagnosis of rare mitochondrial disease and acute cerebrovascular accident. **Patients and methods:** Women, 54 years, come to the emergency room in hospital with stroke-like episode. Due to the local protocol she was examined with laboratory analysis, MRI of cerebri with vessels, CT and MRI of spine, EEG, consultation of ophthalmologist. Also were made analysis for cuprum, ceruloplasmine, homocysteine, transferrine, ferrum, lactate and biopsy of muscular tissues. **Results:** During neurological examination symptoms of ACAV were not found. MRI of the basal nuclei (mostly in globi pallidi) of the brain were found irregular symmetrical focuses (size 14x18 mm) without clear contours, with slightly increased intensity in T1 mode and low signal intensity on T2 mode. Bilateral in subcortical areas of white matter were found sites of gliosis (size 3x3,2 mm) in both frontal-parietal areas. In the vessels of the brain changes were not found. In analysys of blood serum were found normal levels of copper, ceruloplasmin, homocysteine and ferrum. However, moderate increase in lactate levels were observed. Within EEG epileptic activity was not found. A biopsy of muscle tissue revealed the phenomenon of "ragged red fibers" (severity score of 3-4), a sharp decrease in glycogen during the PAS-reaction. According to the results of examination of the patient were excluded ACVA (hemorrhagic and embolic), Wilson's disease, migraine and epilepsy. Biopsy showed the presence of muscle mitochondrial disease. **Conclusion:** Increased levels of lactate in the blood serum, the presence of the phenomenon of "ragged red muscle fibers" and found neurological symptoms indicate a reasonable suspicion about the presence of the MELAS syndrome. This case is also valuable because of the late manifestation of the MELAS syndrome (at the age of 54), that creates additional complexity of diagnosis.

L 014

Ischaemic Stroke Following Anticoagulant Reversal in Patients with Traumatic Intracranial Haemorrhage

J. Cross

Royal Surrey County Hospital, South Thames Foundation School, NHS, Guildford, United Kingdom

Introduction: Anticoagulant drugs are widely used in the treatment and prevention of thromboembolic disease. Although effective in preventing clot formation, patients taking anticoagulants are at greater risk of spontaneous and traumatic bleeding. As such reversal of anticoagulation is often required in patients who present who develop life-threatening haemorrhage. **Objectives:** To highlight the difficulties in balancing pro- and anti-coagulant effects in patients with risk factors for both intracranial haemorrhage and ischaemic stroke. **Cases:** Here we present two patients presenting to the hyperacute stroke unit at our institution. Both patients were admitted following falls with head injuries whilst taking the vitamin K antagonist warfarin. Intracranial bleeding was identified by computed tomography (CT) and anticoagulation reversed in the emergency department. Both patients deteriorated clinically in the following 24-48 hours and repeat cranial imaging showed the development of new ischaemic stroke. **Conclusion:** Aggressive reversal of anticoagulation is often performed in cases of life-threatening bleeding, including intracranial haemorrhage. However, this intervention carries a risk of further neurological insult which must be balanced against the clinical benefit.

Affection of central nervous system in MELAS syndrome [Text] / O. Smorodska, I. Shandyba, P. Bileckiy [et al.] // 26th European Stroke Conference, 24-26 May 2017. - Berlin: Karger Publishers. - S. 38. www.karger.com/Journal/Issue/276259.

Figure 1: Computed tomography (CT) head scan of patient A on the day of admission following a fall with head injury whilst taking warfarin. An acute, right sided subdural haematoma is seen.

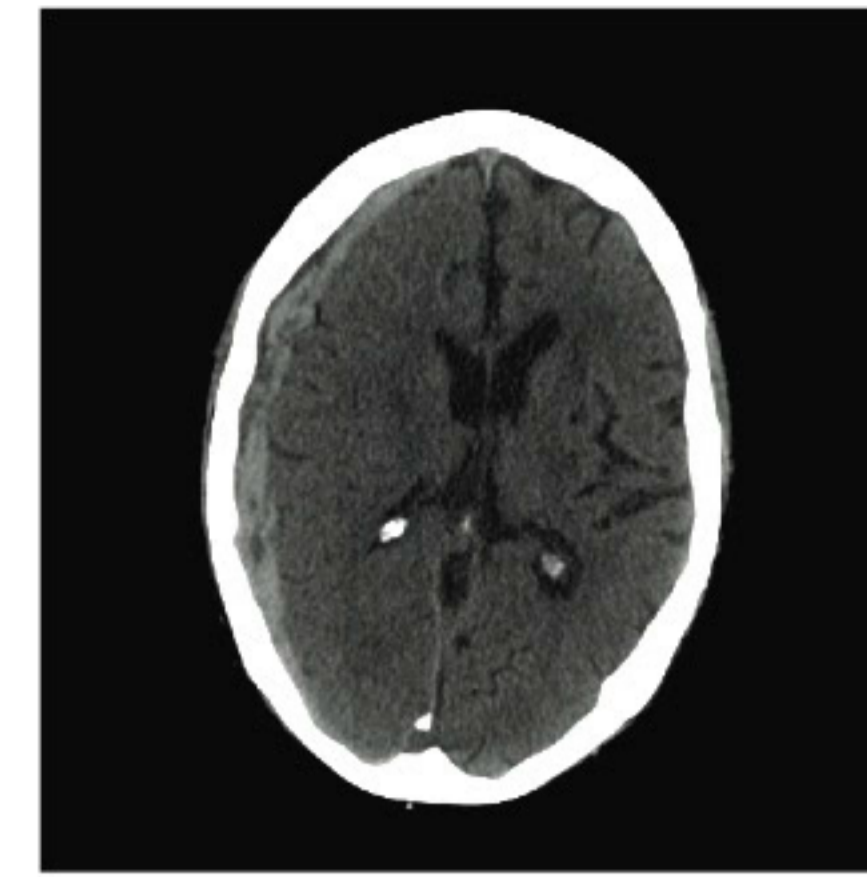


Figure 2: Computed tomography (CT) head scan of patient A two days after admission and aggressive reversal of anticoagulation. The subdural haematoma remains but a wedge shaped hypodensity representing new ischaemic stroke is also visible.

