

Cerebral venous sinus thrombosis induced by chronic abuse by MD ("Ecstasy") - Case report

A. Lucic Prokin^{1,2}, N. Popovic^{1,2}, S. Popovic^{1,2}, P. Slankamenac^{1,2}

¹*Clinic of Neurology, Stroke Unit, Clinical Center of Vojvodina, Novi Sad, Serbia*

²*University of Novi Sad, Faculty of Medicine,, Serbia*

Background: Cerebral venous sinus thrombosis (CVST) accounts for approximately 1% of all stroke events. Venous hemorrhagic infarction (VHI) presents severe form of clinical symptom and a bad prognostic factor of CVST. Chronic use of 3,4-Methylenedioxyamphetamine (MDMA or "ecstasy") can rarely cause CVST. Case report: A 19 year-old female presented to the Emergency Room after serial epileptic seizures with right hemiparesis. She consumed ecstasy and alcohol chronically, sometimes with Benzodiazepines. Urine analysis was proved positive for MDMA and blood toxicology analysis registered diazepam. HIV serology was nonreactive. A head computed tomography scan (CT) at admission showed massive parenchymal hemorrhage in the left frontal and parietal lobes with suspected thrombosis of the sinus sagittalis superior, but CT angiography was normal. After two days, Magnetic Resonance Imaging, Angiography and Venography (MRI/MRA/MRV) revealed an massive VHI within the thrombosis of the sinus sagittalis superiors and certain cortical veins with subfalcine and uncal herniation. Immunological and genetic tests were normal, but coagulation tests showed hyperfibrinogenemia. The patient's hemorrhage was clearly contraindicated for using heparin; therefore, no anticoagulants or thrombolytic agents were administered during her 4-day life. The decompressive hemicraniectomy was not performed. Conclusion: There are still many unanswered questions regarding the pathophysiology and pharmacology of the toxic effects of MDMA. Venous thrombosis could be a result of thrombogenic effect and dehydration induced by MDMA. Systemic anticoagulation is the first-line treatment for CVST, but our case is the proof that sometimes we must have an individual approach to treatment. Key words: ecstasy, venous thrombosis, anticoagulants