

## **Infectious endocarditis initially presented by septic embolization of the central nervous system - a case report**

*Marija Popović<sup>1</sup>, Đorđe Stevanović<sup>1,2</sup>, Ljiljana Marić Stepanović<sup>1</sup>, Mina Poskurica<sup>1</sup>, Vladimir Zdravković<sup>1,2</sup>*

*<sup>1</sup>Cardiology Clinic, University Clinical Center Kragujevac, Serbia, <sup>2</sup> Department for Internal medicine, Faculty of medical sciences, University of Kragujevac, Serbia*

**Introduction.** Infective endocarditis (IE) is a life-threatening condition, whose clinical presentation is often not pathognomonic, especially in the initial stage, which is why timely diagnosis can be difficult.

**Case report.** In our report, the patient was hospitalized due to elevated body temperature, dyspnea, and altered state of consciousness. Considering the history of two previous cerebrovascular insults (CVI) and altered state of consciousness on admission, along with an ischemic zone with potential reinfarction verified by brain MSCT, the patient was initially managed as recurrent CVI and a septic state of unknown etiology. Considering the seemingly clear cause of the neurological condition and pneumonia as a potential explanation for the inflammation, the triage procedure and examination of the patient were shortened. Only after additional clinical deterioration accompanied by an increase in cardio-specific markers did the consulting cardiologist diagnose mitral valve IE, on the eighth day of hospitalization. In the following period, infective endocarditis was treated medically, and the patient, with the persistence of neurological symptoms, developed septic embolization of the kidney, a mechanical complication of IE in the form of the posterior mitral cusp chord rupture, and acute cardiorenal syndrome. The planned transfer to a cardiac surgery facility was postponed due to a positive SARS-CoV-2 antigen test, and the patient was transferred to a COVID hospital, where she deceased after two months of treatment.

**Conclusion.** Considering the cardiac and non-cardiac manifestations of a potentially fatal disease, it is necessary to first have IE in the differential diagnostic algorithm of complex patients, and from the moment of diagnosis, a multidisciplinary approach and continuous monitoring, with the aim of a more adequate treatment.

**Key words:** COVID-19, infectious endocarditis, septic embolizations, stroke