

Left ventricular outflow tract endocarditis: an unusual cause of multiple brain embolisms

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OBJECTIVES: Neurological complications arise among 15 and 30% of patients with infective endocarditis. We aim to describe an unusual cause of septic embolisms. **METHODS:** We present a 50-year-old woman with previous arterial hypertension. She was admitted due to abrupt onset of fever, confusional state, and papular-erythematous spots located on the trunk, face and extremities. Cerebrospinal fluid analysis revealed 142 white blood cells per mm³ (96% neutrophils) with a negative Gram stain, 58.2 mg per dl of protein, and a normal glucose level. Empirical antimicrobial therapy was initiated. Brain magnetic resonance imaging showed multiple cortico-subcortical embolic lesions, located in both cerebral and cerebellar hemispheres and basal ganglia, as well as a mild leptomeningeal enhancement. In a transthoracic echocardiography, neither vegetations nor valve dysfunction were observed. **RESULTS:** Two days after admission our patient presented an acute coronary syndrome with ST elevation. A transesophageal echocardiography identified a rounded 1 cm² echogenic mass anchored into left ventricular outflow tract (LVOT) endocardium, contacting with anterior mitral leaflet during diastole. Blood cultures were positive for Methicillin Sensitive *Staphylococcus Aureus* (MSSA). Due to clinical evolution and the inability to control septic emboli, the patient underwent emergency surgical removal of the intracardiac mass. The postoperative course was uneventful with no neurological deficits at discharge. **CONCLUSION:** LVOT is an infrequent location of abscesses and vegetations and their embolisms are commonly difficult to control. In case of brain embolisms without severe clinical impairment, surgery should not be delayed. Early surgical treatment significantly reduces mortality, without increased risk of new neurological events.