Infectious endocarditis: a diagnostic challenge

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Abstract

Introduction: Endocarditis is a disease whose presentation is not uniform, depending on the existence of underlying cardiac pathology, the microorganism involved and the presence or absence of complications. The treatment of this disease involves eradication of the bacterium of avascular vegetation, and an early therapeutic approach is imperative.

Case Report: A 75-year-old woman with a history of type 2 diabetes, dyslipidaemia, and moderate aortic stenosis, was admitted with sudden dizziness, headache and ataxia. Neurologic examination revealed mild ataxia of her left inferior limb. Blood tests were normal, and admission brain CT showed cortical atrophy and no recent vascular lesions. Patient was hospitalized with a diagnosis of acute stroke or transient ischaemic attack (TIA). Transthoracic cardiac echocardiography revealed severe aortic stenosis and a moderately dilated left atrium. Duplex ultrasonography revealed only minor carotid atheromatosis. At the 6th day of hospitalization, fever and neurological aggravation arose with disorientation and moderate left hemiparesis that persisted during five hours. Blood cultures were positive, with growth of Streptococcus anginosus. Multiple recent punctiform lesions in the pons, and in the cerebellar and cerebral hemispheres suggestive of embolic aetiology were noted in the brain MRI. Although transoesophageal echocardiography did not reveal vegetations, she started treatment for bacterial endocarditis with meropenem and linezolid for 6 weeks. She was referred for cardiothoracic surgery. However, the patient suddenly died before surgery.

Conclusion: Endocarditis is an important source of cardiac embolism, and the brain is one of the most frequent sites of embolization. In this case, we aim to emphasize endocarditis as a possible cause of stroke and TIA.