

Case report: Unrecognized bacterial endocarditis – a cause of cerebral hemorrhage

A. Taseva Vasileva, M. Klincheva, T. Milunovic, Zh. Mitrev
Faculty of Medical Sciences, "Goce Delchev" University, Shtip, North Macedonia
PZU Zhan Mitrev Clinic, Skopje, North Macedonia



Introduction:

Infective endocarditis is an infection with high morbidity and mortality, associated with serious complications.

The purpose of this case report is to demonstrate the importance of timely diagnosis of bacterial endocarditis, as well as one of the contraindications of anticoagulant therapy.

Patient presentation

A 63-year-old man, without cardiovascular comorbidities, was admitted in a severe general condition, confused and disoriented. Heteroamnestic information from the wife about a dental intervention 2 months ago, after which he suffered a stroke. According to his wife, he did not receive any antibiotics during that period.

Risk factors: does not consume alcohol, does not smoke cigarettes.

Without medical records, according to tests done at another medical facility, the cause of the stroke was unclear, and it was assumed that he had a paroxysmal atrial fibrillation. At this time received an acenocoumarol 4 mg therapy according to the scheme, and bisoprolol 2.5 mg per day.

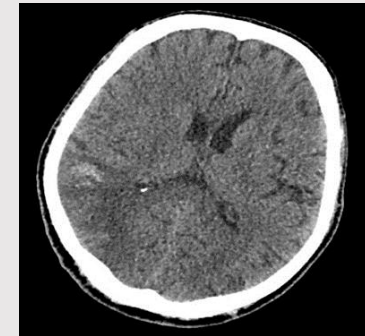
Initial work up and results

The results of biochemical blood analyzes are within reference values, with the exception of D-dimers-2270 ng/ml and CRP-71.8 mg/l, and the blood culture result showed the presence of **Streptococcus viridans**.

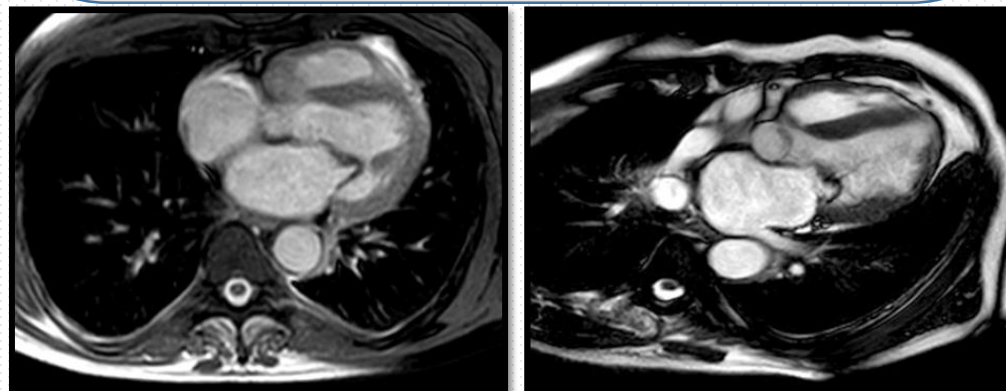
Transthoracic echocardiography showed severe mitral stenosis with moderate mitral regurgitation, suspicious vegetation of the anterior mitral cusp.

MSCT of the brain – subacute postischemic lesions temporooccipitally on both sides, and a hyperdense component is seen on the right, which is in addition to hemorrhage, hemorrhagic transformation of ischemia.

Magnetic resonance of the heart – mitral stenosis and insufficiency, vegetations present on both cusps, excluding the presence of thrombi.



Preoperative brain CT



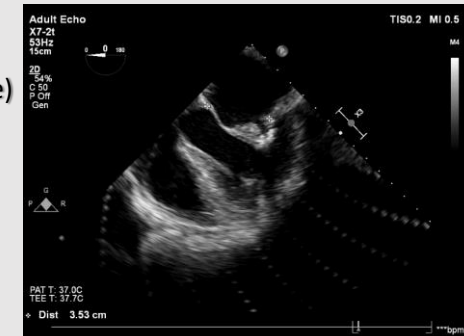
Preoperative CMR

Follow up

After 10 days of hospitalization, the patient was discharged from the hospital in a stable general condition and he was advised to receive therapy comprising amoxicillin for 14 days, nadroparin 0.4ml subcutaneously until surgery, spironolactone, furosemide, cordipine, perindopril, bisoprolol, pantoprazole.

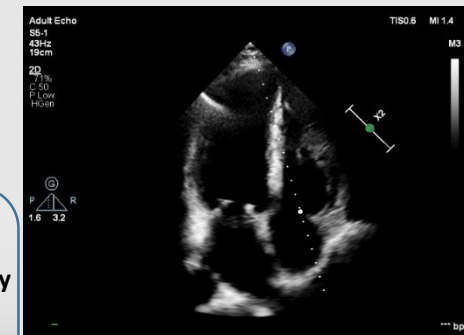
After 1 month the patient underwent a surgical mitral valve replacement with a St. Jude Medical 27 mm biologic prosthesis and a tricuspid valve reconstruction with atrioplasty.

Intraoperative transesophageal echocardiography (preoperative) shows a severe mitral stenosis with calcified mitral cusps and vegetations present.



Intraoperative TOE-Preoperatively

Postoperative transesophageal echocardiography shows properly positioned and properly functioning biological valve 27mm, reconstructed tricuspid valve with proper function.



Postoperative Follow up TEE

Conclusion:

Bacterial endocarditis is one of the causes for stroke. A thorough history and appropriate diagnostics are necessary for timely diagnosis and prevention of complications from bacterial endocarditis.