Abstract: P835

Mitral valve abscess complicating infective endocarditis

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Topic(s):
Echocardiography: Valve Disease

Citation:
n/a

Background:
Health care associated infective endocarditis (HAIE) accounted for up to 30% of infective endocarditis (IE) cases, it tends to affect patients with a poor clinical condition and represents a considerable in-hospital mortality.

Case:
A 75-years old gentleman with end-stage renal failure secondary to polycystic kidney disease had commenced hemodialysis via a tunneled hemodialysis catheter 3 months ago, presented for pre-operative evaluation before vascular surgery for acute left lower limb ischemia, patient gave history of fever for the past month partially responding to antipyretics along with recent ischemic cerebrovascular stroke with no residual neurological deficits. On examination he had a blood pressure of 110/70 mmHg, a heart rate of 100 bpm, a temperature of 38oC, and a harsh pansystolic murmur over the apex. Laboratory results revealed leukocytosis elevated CRP and blood cultures were positive for staphylococcus aureus. Electrocardiography showed sinus tachycardia.

Methods and Results:
2D-Trans-Thoracic Echocardiography (TTE) revealed the presence of echogenic rounded mobile mass measured 2x2 cm attached to the atrial surface of the posterior mitral valve leaflet. There was a severe mitral valve regurgitation and the regurgitant jet was directed anteriorly swirling around the mass. The left ventricle dimensions and function were normal. 2D-Trans-esophageal Echocardiography(TEE) was done for better visualization of the mass and it's attachment. The mass was overlying the atrial surface of the posterior leaflet middle P2 scallop with a small echo-lucent cavity (abscess formation) in the leaflet in addition to another smaller mass at the atrial surface of the anterior leaflet. The aortic, tricuspid and pulmonary valves were normal in structure and function

Discussion:
Echocardiography is a crucial imaging modality in a patient with multiple systemic emboli to rule out cardioembolic source of embolization. TEE is of added value along with TTE in better definition of masses and detection of IE related complication.

While the patient was prepared for the vascular surgery to secure the ischemic limb his sensorium was disturbed and became unconscious immediate brain computed tomography showed severe intracranial hemorrhage and the patient died.

Conclusions:
Patient with chronic kidney disease and on hemo-dialysis are highly vulnerable to health care related infective
endocarditis and high clinical suspicion should be given in a situation of prolonged fever and embolic events. Mitral valve abscess is a rare complication of infective endocarditis and if occurs it leads to increase mortality. TEE should be an integral part of management of patients with IE to role out serious complications.