Abstract: P1701

Biatrial thrombus detection in a patient with atrial paroxysmal fibrillation and asymptomatic massive pulmonary embolism

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Topic(s):
Echocardiography: Masses and Sources of Emboli

Citation:
Introduction:Computed tomography (CT) is a noninvasive test for detection of LA and LAA thrombus. Although the transesophageal echocardiogram is the gold standard method, it can have rare but potential life threatening complications. Case report: A 62 y.o woman presented to the ER complaining of palpitations started less then 12h ago with no chest pain or dispnea. She was diagnosed with high rate paroxysmal atrial fibrillation (HR~120/min). The ECG showed AF with no specific changes, the troponin I (TPI) level was negative and a TTE revealed a dilated left atria. The other lab results were within normal range (TBC and blood chemistry). Her past medical history included hypertension and diabetes type 2 for 10 years and 6 months respectively both on regular treatment and obesity. Also 2 months ago she was diagnosed with Hashimoto thyroiditis and close monitoring of TSH was recommended but no treatment. Subsequently, LMWH (enoxaparin) and amiodarone loading dose for cardioversion were started. After 24h the pt was still in AF, with a controlled heart rate and no complains. However ECG changes were noticed (evolutive T negative waves in leads D1,D2,aVL,V3-V6). A D-Dimer was requested and came back negative, O2 saturation was 97%. The asymptomatic pt was transferred to the Cardiology ward for further evaluation. TPI remained negative. Due to the cardiac risk factors and the ECG changes it was decided to perform a coronary angiography which resulted normal. An electrical cardioversion was considered. Both TEE and pulmonary angio CT were requested prior. Because of the ECG changes the CT was performed first and showed central and peripheral bilateral pulmonary artery clots present also in both the left and right atrial auricles. Due to the massive thromboembolism (PE) unfractioned heparin was immediately started (aPTT 50-70s). A new TTE showed a PAP of 50 mmHg. Approximately 10h after the heparin infusion, the pt became hypotensive and started complaining of dyspnea, tachypnea, cough, pleuritic pain and fever (high temperature 39.5-40?C). Considering the deteriorating conditions she was consulted by a cardiac surgery team and it was decided to perform an emergency surgical pulmonary embolectomy despite the high risk. Within 24h, the pt underwent a surgical embolectomy of the right and left pulmonary branches after incision of the pulmonary artery, as well as a clot embolectomy of the right and left atria auricles (confirmed by intraoperative TEE). She was put on an iv heparin regimen and recovered well. She was discharged 2 weeks later in good condition, with a PAP of 40 mmHg, on acenocoumarol with persistent AF. 1.5 years later she is in NYHA class I, in sinus rhythm taking rivaroxaban 20 mg/d. Discussion: Biatrial thrombus detection in both atrial auricles is rare as well as in this case a massive PE without a stroke. CT can be used as an alternative modality for detecting thrombus in selected high risk patients because it shows a good diagnostic accuracy with high sensitivity and specificity.
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