

Case Report

Finding of left atrial appendage thrombus despite a normal preoperative transthoracic echocardiography. Importance of intraoperative TEE. Case reportSara López Palanca¹, Eva Mateo Rodríguez², Paula Carmona García³¹Anesthesia and Intensive Care. General Hospital of Albacete. Albacete. Spain² Cardiovascular-Anesthesia and Intensive Care. General Hospital of Valencia. Valencia. Spain.³Cardiovascular-Anesthesia and Intensive Care. University Hospital La Fe. Valencia. Spain.

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CORRESPONDENCE AUTHOR: Sara Lopez Palanca**E-mail:** saralopal@gmail.com**ABSTRACT:**

We report the case of a 60-year-old woman with atrial fibrillation, scheduled for aortic and mitral replacement. The intraoperative TEE revealed a new pedunculated mass in LAA protruding to LA. Preoperative TTE had been performed 2 months before, showing any mass inside.

Routine screening of the LAA for thrombi in these patients has not been investigated systematically, but screening also may be beneficial in patients with mitral valve disease, and in patients with LV dysfunction, as an LAA thrombus may be present in the absence of AF. According to the latest guidelines, TEE should be used in all open heart procedures in order to: confirm and refine the preoperative diagnosis, detect new or unsuspected pathology, adjust the anesthetic and surgical plan accordingly, and assess the results of surgical intervention.

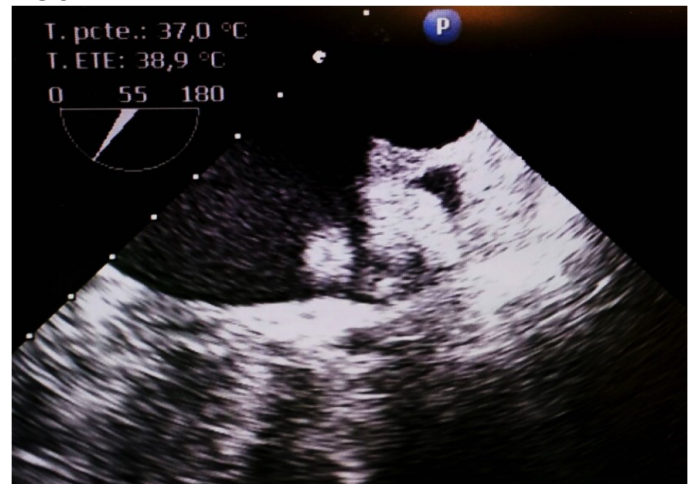
Therefore, a thorough understanding of the LAA's echocardiographic evaluation and the consequences of its removal are essential for the anesthesiologist.

BACKGROUND:

Transthoracic echocardiography (TTE) cannot reliably exclude left atrial (LA) thrombi prior cardiac surgery. LA thrombi have been shown to be associated with an increased stroke rate. TEE has a sensitive and specificity of 100% in detection of LA and left atrial appendage (LAA) thrombi in contrast to TTE which has limitations when assessing the presence of masses or thrombi in the left atrium¹.

CASE REPORT

We report the case of a 60-year-old woman scheduled for aortic and mitral replacement. Her history includes atrial fibrillation and ischemic stroke. Chronic anticoagulation was suspended five days before surgery and low molecular weight heparin began. The intraoperative TEE revealed a new 20x30 mm diameter pedunculated mass in LAA protruding to LA (Fig. 1 y 2). Preoperative TTE had been performed 2 months before, showing any mass inside. This made the surgeon was very cautious in the left atrial opening because the possibility of thrombus embolization.

FIGURE 1

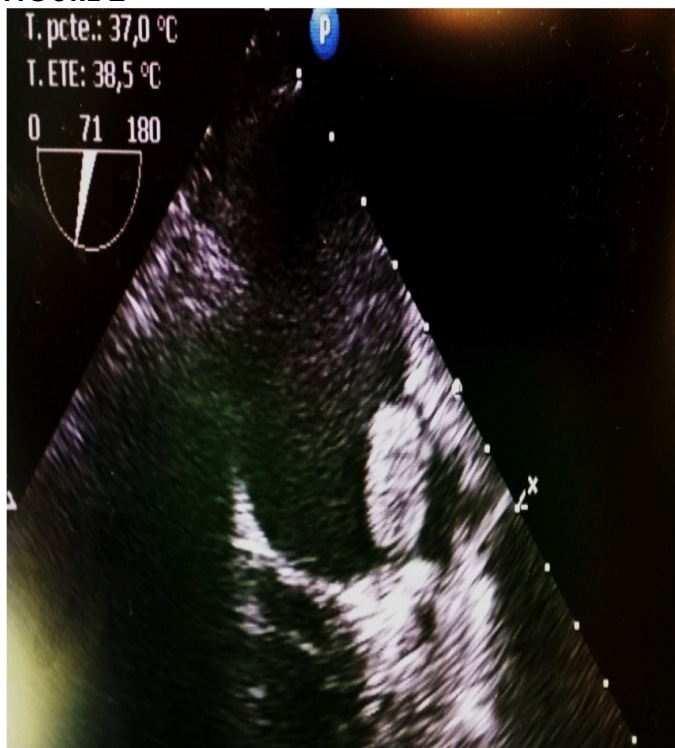
DISCUSSION:

According to the latest guidelines, TEE should be used in all open heart procedures in order to: (1) confirm and refine the preoperative diagnosis, (2) detect new or unsuspected pathology, (3) adjust the anesthetic and surgical plan accordingly, and (4) assess the results of surgical intervention².

Our case confirms the importance of detection of new findings prior the operation which changes the surgical procedure and planning.

Thrombi appear as echogenic mass protruding into the main cavity, and are generally broad and pedunculated base, they mostly are stationary. It should make us suspect its presence whenever there are stasis phenomena such as atrial fibrillation and mitral stenosis. Thrombogenic risk increases with decreasing LAA velocities: <20 cm/s (29%) 20-40 cm/s (10%) and >40 cm/s (1%). The flow velocities in LAA as may incur indication surgery ligation³.

The withdrawal of the anticoagulation, can cause thrombosis in this area and therefore its substitution for HLMW is necessary although not always prevent from a new thrombus.

FIGURE 2**CONCLUSIONS:**

TEE should be used in all open heart procedures⁴.

Intraoperative TEE gives the possibility to detect new pathologies that changes the surgical procedure⁴.

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