

LETTER

Postoperative left ventricular thrombosis and transthoracic echocardiography: is it enough?

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See related research by Saranteas *et al.*, <http://ccforum.com/content/15/1/R54>

We read in detail the recent study of Saranteas and colleagues in a recent issue of *Critical Care* [1]. These authors emphasize the value of transthoracic echocardiography (TTE) for the diagnosis of intraventricular thrombosis in the postoperative period, especially in patients with dilated or ischemic cardiomyopathy.

We believe that TTE is a noninvasive imaging technique useful in the context of critical care; but we must be honest about its limitations. In patients at high risk for thrombosis, such as patients with dilated cardiomyopathy, akinetic segment or severe depression of left ventricular ejection fraction (LVEF), non-observance of intraventricular thrombus should lead us not to exclude their presence. In the critical care setting, the presence of a suboptimal acoustic window limits the results of this exploration. Contrast echocardiography represents a further step in improving accuracy in the diagnosis of intraventricular thrombi. On the other hand, we must not forget the presence of left atrial appendage thrombi. For its detection, the most accurate technique is the transoesophageal echocardiography. A recent study concluded that in the presence of normal LVEF and normal left atrial volume, the probability of finding a thrombus in the appendage was very low [2]. Therefore, being advocates of the great utility of TTE in critical care units, we are aware that, in special clinical conditions, the information it provides is insufficient. So we end up with

the following thought: should one remain relaxed about a patient who recently had abdominal surgery and has dilated cardiomyopathy and a LVEF of 23% without anticoagulation, and without intraventricular thrombi in TTE?

Abbreviations

LVEF, left ventricular ejection fraction; TTE, transthoracic echocardiography.

Competing interests

The authors declare that they have no competing interests.

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