Images in cardio-thoracic surgery

Three-dimensional echocardiography is a useful tool in the diagnosis of left ventricular pseudoaneurysm

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The diagnosis of left ventricular (LV) pseudoaneurysms is difficult, and for accurate diagnosis, transthoracic echocardiography should be reinforced with other imaging modalities (Figs. 1 and 2). Three-dimensional (3D) echocardiography can be useful in identification of these complications because it is less time consuming and a non-invasive method (Video 1).

Fig. 1. Transthoracic 3D echocardiographic imaging was performed by using Vivid 7 Dimension echocardiography equipment (GE, Vingmed, Horten, Norway). Pseudoaneurysm on the basal posterolateral wall and discontinuity of the myocardium (arrow heads) were shown in apical-to-basal transversely acquired slice of the left ventricle. MV, mitral valve; PsA, pseudoaneurysm; RV, right ventricle.

Fig. 2. Discontinuity of the myocardium in the pseudoaneurysm was also identified by contrast-enhanced multislice computerized tomography. LV, left ventricle; LA, left atrium; A, pseudoaneurysm.

Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at doi:10.1016/j.ejcts.2007.04.008.