A 75-year-old man underwent transoesophageal echocardiography after having several transient ischaemic attacks. Cardiac examination was unremarkable. The transverse view of the descending thoracic aorta by conventional two-dimensional transoesophageal echocardiography (Fig. 1, left panel) exhibited extensive atherosclerosis. Atherosclerotic plaques and debris are common findings in elderly patients. The aorta was analysed using live three-dimensional transoesophageal echocardiography (Fig. 1, right panel). This view demonstrates the extent and irregular shape of the atheromatous plaque. The presence of aortic debris may explain spontaneous embolization or embolization through diagnostic procedures, such as coronary angiography.

Comment

Live three-dimensional echo is a new echocardiographic technique that will play an important role in the future for the assessment of cardiac disease. The procedure may be of particular value in the evaluation of valve diseases including mitral valve prolapse.
**Figure 1.** Transverse view of descending thoracic aorta by (left panel) two-dimensional transoesophageal echocardiography and (right panel) live three-dimensional transoesophageal echocardiography.