EPIAORTIC, TRANSESOPHAGEAL ECHOCARDIOGRAPHIC & 3D ECHOCARDIOGRAPHIC EVALUATION OF THE AORTA
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Epiaortic echocardiography may provide an advantage over TEE by allowing more freedom to maneuver the probe position on the ascending aortic surface, thus facilitating alignment of the continuous wave Doppler beam even in the presence of severe AV stenosis, heavy calcification, or eccentric jets. In addition, there may be specific situations in which TEE examination yields conflicting results that could be clarified by epicardial echocardiography.

Imaging planes:
The following epicardial / epiaortic echocardiographic imaging planes were developed in an attempt to construct a comprehensive examination that would provide views to facilitate interpretation of pertinent cardiac pathology. The first 5 epicardial views provide imaging planes of cardiac and great vessel anatomy that are equivalent to TEE views recommended in the American Society of Echocardiography/Society of Cardiovascular Anesthesiologists guidelines (38).

Aortic root view:
This view is obtained by placing the probe on the aortic root to permit interrogation of the AV and proximal ascending aorta as well as the LVOT.

Proximal aortic arch equivalent view:
Moving the probe even slightly more cephalad from the ascending aorta position provides a long-axis view of the proximal aortic arch and great vessels (Figure 75), which corresponds to the TEE aortic arch long-axis view. This view may be particularly advantageous in patients with an acute intraoperative aortic dissection to assess the exact extension of the dissection and to identify a true or false lumen.

Epicardial and epiaortic echocardiography are valuable in the comprehensive intraoperative evaluation of the cardiac surgical patient.