

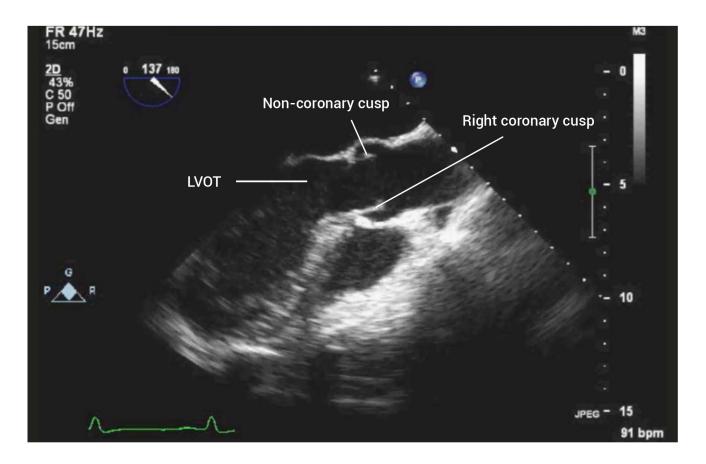
TEE ESSENTIALS

Assessment of the aortic valve: Mid-esophageal long-axis view

The mid-esophageal aortic valve long-axis view is obtained using a transducer angle of 120–140°. Center the aortic valve in the middle of the sector.

The cusp in the far field is the right coronary cusp. The cusp in the near field is usually the non-coronary cusp, but may be the left coronary cusp depending upon the exact imaging plane. Turning the probe from left to right will ensure that all three coronary cusps have been visualized.

In this view, the structure and mobility of the aortic valve cusps can be assessed, as well as the structure of the adjacent left ventricular outflow tract (LVOT) and aortic root. Use color Doppler to assess flow through the valve and the adjacent structures.



Measurements

Measure the diameter of the LVOT within 0.5 cm of the aortic valve annulus, during early to mid-systole. The diameter of the aortic annulus should also be measured (between the hinge points of the aortic valve cusps) —a normal annular diameter is 1.8–2.5 cm. Measurement of the aortic root is discussed in the chapter on assessment of the aorta.

Further reading

Hahn RT, Abraham T, Adams MS, et al. 2013. Guidelines for performing a comprehensive transesophageal echocardiographic examination: Recommendations from the American Society of Echocardiography and the Society of Cardiovascular Anesthesiologists. *J Am Soc Echocardiogr.* **26**: 921–964.