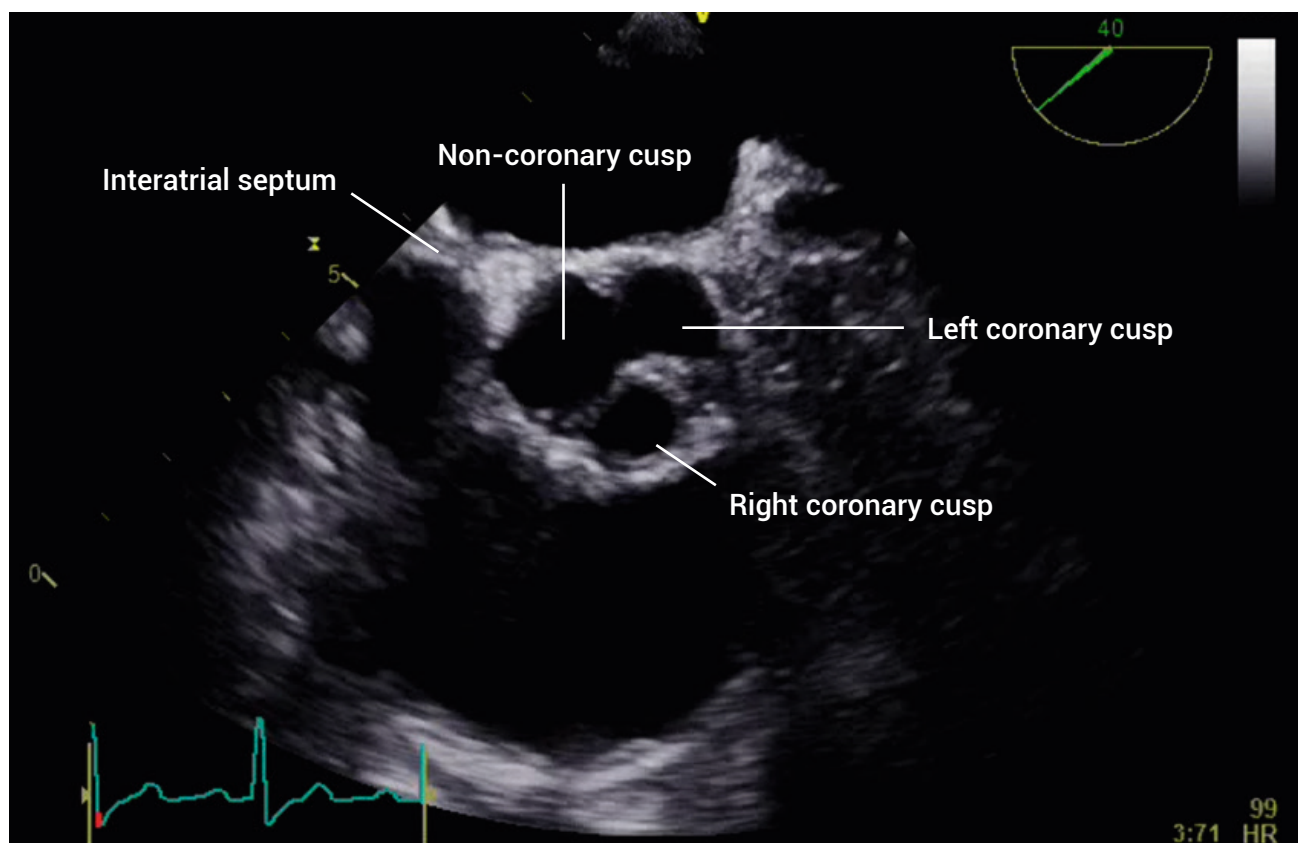


TEE ESSENTIALS

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

The mid-esophageal aortic valve short-axis view is obtained using a transducer angle of 25–45°. Center the aortic valve in the middle of the sector. Sometimes a small amount of anteflexion of the probe tip can help optimize the image.

The non-coronary cusp is adjacent to the interatrial septum, the right coronary cusp is anterior to this (and adjacent to the right ventricular outflow tract (RVOT)), and the remaining cusp is the left coronary cusp. Slight withdrawal of the TEE probe in the short-axis view will often show the coronary artery ostia as they arise from the sinuses of Valsalva. Use color Doppler to assess flow through the valve.



Measurements

This view permits direct planimetry of the aortic valve orifice area, except when the valve is heavily calcified (which makes identification of the cusp margins difficult). Take care to ensure that planimetry is performed at the cusp tips—performing planimetry across the body of the cusps will overestimate orifice area. An orifice area $<1.0 \text{ cm}^2$ (or an indexed orifice area $<0.6 \text{ cm}^2/\text{m}^2$ body surface area) indicates severe aortic stenosis.

Further reading

Baumgartner H, Hung J, Bermejo J, et al. 2009. Echocardiographic assessment of valve stenosis: EAE/ASE recommendations for clinical practice. *Eur J Echocardiogr*. **10**: 1–25.