

TEE ESSENTIALS

Assessment of the right heart: Mid-esophageal four-chamber view

This TEE view is obtained at the mid-esophageal level, using a transducer angle of $0-20^{\circ}$. Turn the probe towards the patient's right, in order to center the right heart as far as possible within the sector. This view shows the right atrium, tricuspid valve, and right ventricle.



Check for any right atrial abnormalities, such as dilatation or the presence of a mass (e.g., thrombus or tumor).

Assess right ventricular size (the right ventricle is normally no more than two-thirds of the size of the left ventricle), morphology, and systolic function.

Assess the structure of the tricuspid valve, and use color Doppler to assess tricuspid valve flow.



Measurements

Measure the right ventricular internal diameter at its base point and mid-point in end-diastole. Right ventricular dilatation is indicated by:

basal end-diastolic diameter >42 mm **and/or** mid end-diastolic diameter >35 mm

Measure the tricuspid annulus from hinge point to hinge point at end-systole and end-diastole. These measurements are useful for cardiothoracic surgeons when planning tricuspid valve repair.





Further reading

Rudski LG, Lai WW, Afilalo J, et al. 2010. Guidelines for the echocardiographic assessment of the right heart in adults: a report from the American Society of Echocardiography. *J Am Soc Echocardiogr.* **23**: 685–713.