A 22-year-old man is seen for shortness of breath. Cardiac ultrasound / echocardiography is performed (Figure 1).

Figure 1. Cardiac ultrasound.

Which of the following best describes the ultrasound?

1. Enlarged left atrium
2. Enlarged left ventricle
3. Enlarged right atrium
4. Enlarged right ventricle
5. Normal
Correct!

5. Normal

Often we often see so many abnormalities that normal becomes unique.

![Echocardiogram with the 4 chambers labeled.](image)

Figure 2. Echocardiogram with the 4 chambers labeled.

The right chambers are on the left of the screen and the left chambers are on the right.

RV: right ventricle. In the 4 chamber view, the RV width should be similar to or smaller than the LV width. You can estimate the RV function by looking at the vertical motion of the lateral tricuspid annulus. The contraction of the RV is mainly longitudinal.

RA: right atrium. The tricuspid valve separates the RV and RA. Tricuspid regurgitation can be assessed with color Doppler.

LV: left ventricle. You can assess the overall function of the left ventricle and the contractility of the interventricular septum, apex and lateral wall.

LA: left atrium. In this view you can measure the long and short axis of LA and its area and volume. The mitral valve separates the LA and LV. The anterior leaflet is close to the inter-atrial septum, the posterior leaflet is lateral.

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Reference