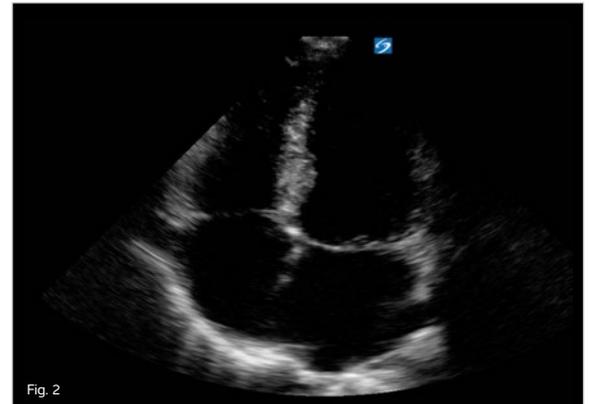
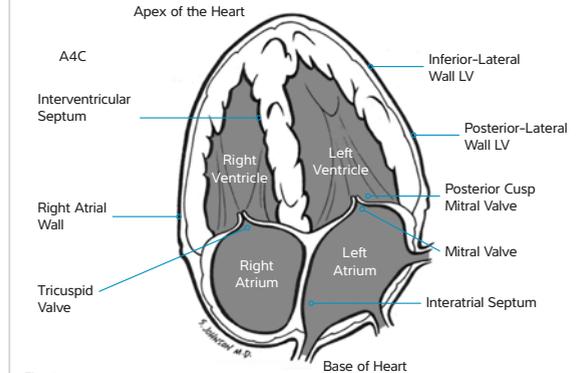


## ATRIAL VOLUME RIGHT AND LEFT ATRIUMS

Atrial volume is a measurement used to help determine the size of the atriums and can be an early predictor of certain disease states.



## ATRIAL VOLUME

The left atrial size is a strong predictor of events and can help with the assessment of early left atrial dysfunction and in certain conditions an enlarged left atrium (LA) such as: atrial fibrillation, valvular heart disease, hypertension, heart failure or cardiomyopathy.

Right atrial enlargement is also a strong indicator for the severity of a disease or situations such as: tricuspid regurgitation, pulmonary hypertension, right side heart failure, or in acute events like pulmonary embolisms. In right atrial volume or fluid overload the IVC will also appear dilated.

Both the right atrium (RA) and left atrium (LA) may be measured by obtaining volume measurements using the Simpson method.

### Performing measurement:

Obtain a Apical 4 Chamber view (A4CH) (Fig. 2) and Apical 2 Chamber view (A2CH) of your chosen atrium.

- Select atrial volume, using the A4CH, trace your chosen atrium (Fig. 3 and Fig. 4) – Save Calc.

- Select A2CH view and repeat the trace of the chosen atrium (Fig. 5) – Save Calc.
- Take both tracings at maximum atrial volume when the ventricles are in end-systole.
- Normal volume measurements for the LA: Women < 38mm, Men < 40mm.

