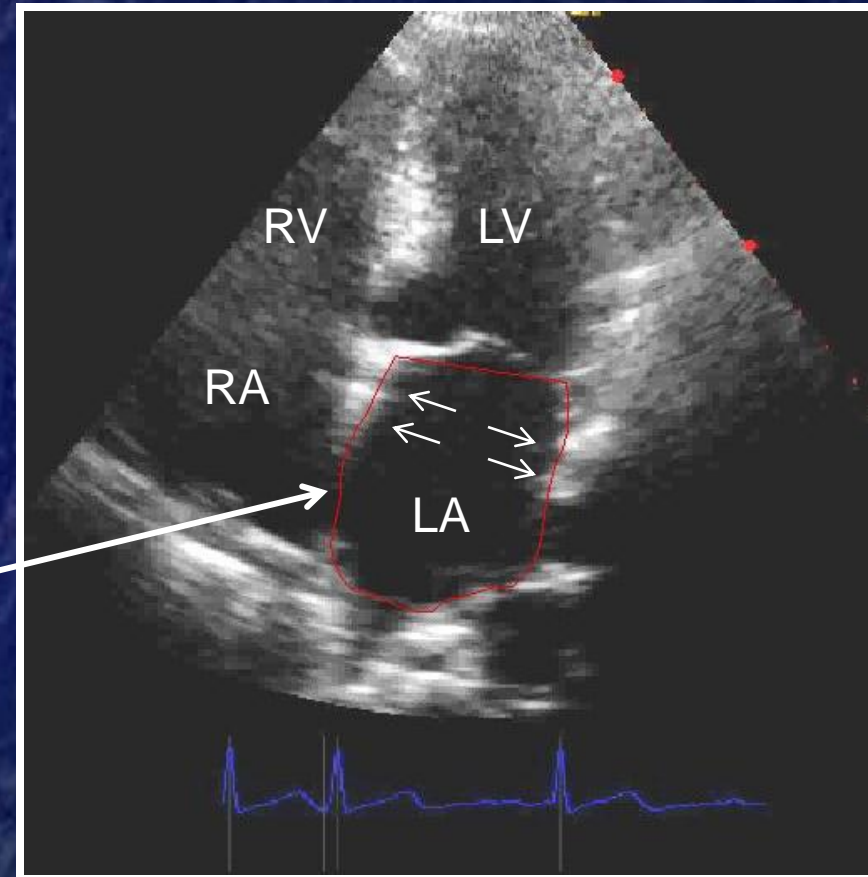


Measuring LA Volume

- Measure at end-systole
 - LA is at its largest dimension in the cardiac cycle usually on the frame just before the mitral valve opens
- Allow for “lateral” resolution
 - Trace just outside the black-white interface
 - Leaving some of the “fuzzy” white inside the trace.



LA VOLUME INDEX

Normal = $22 \text{ cc/m}^2 \pm 6$

J Am Soc Echocardiogr 2005;18:1440-1463.

EXAMPLE:

4ch Area (A4c) = 19.6 cm²

2ch Area (A2c) = 18.7 cm²

4ch Length = 4.8 cm

2ch Length = 4.6 cm

Shortest Length (L) = 4.6 cm

BSA 2.0 m²

LA VOLUME = $8/3\pi [(A4c) \times (A2c) / L]$

LA VOLUME = $0.85 [(19.6) \times (18.7) / 4.6]$

LA VOLUME = $0.85 [79.68]$

LA VOLUME = 67.7 cm³ or mL or cc

LA VOLUME INDEX = LA VOLUME / BSA

LA VOLUME INDEX = $67.7 / 2.0$

LA VOLUME INDEX = 33.9 cc/m²

LA VOLUME INDEX = 34 cc/m²