

Calculation of RV/LV ratios on positive PE CTAs

Goal: Add RV/LV ratio to all CTA chest studies that are positive for pulmonary emboli. Target is 75% compliance after 6 months.

Rationale: ICU is now using RV/LV ratios to stratify PE patients for pharmaceutical vs mechanical treatment per their new PERT protocol. They have indicated a need for RV/LV ratios to be listed on reports. We can provide value to our ordering physicians by providing this in our reports.

How to measure RV/LV ratios:

Measurements are the **maximum** distance from the interventricular septum to the endocardial **border** perpendicular to the long axis of the heart. Measurements should be taken at the **level of the tricuspid and mitral valves (valves may not be on the same level)**. The ratio tool can be added to your toolkit. Drawing two lines then yields the ratio. An example is below. We will be monitoring compliance through montage and will have an update after 3 months. Nick Fulton has created a template for RV/LV ratio titled **"reference positive PE"**

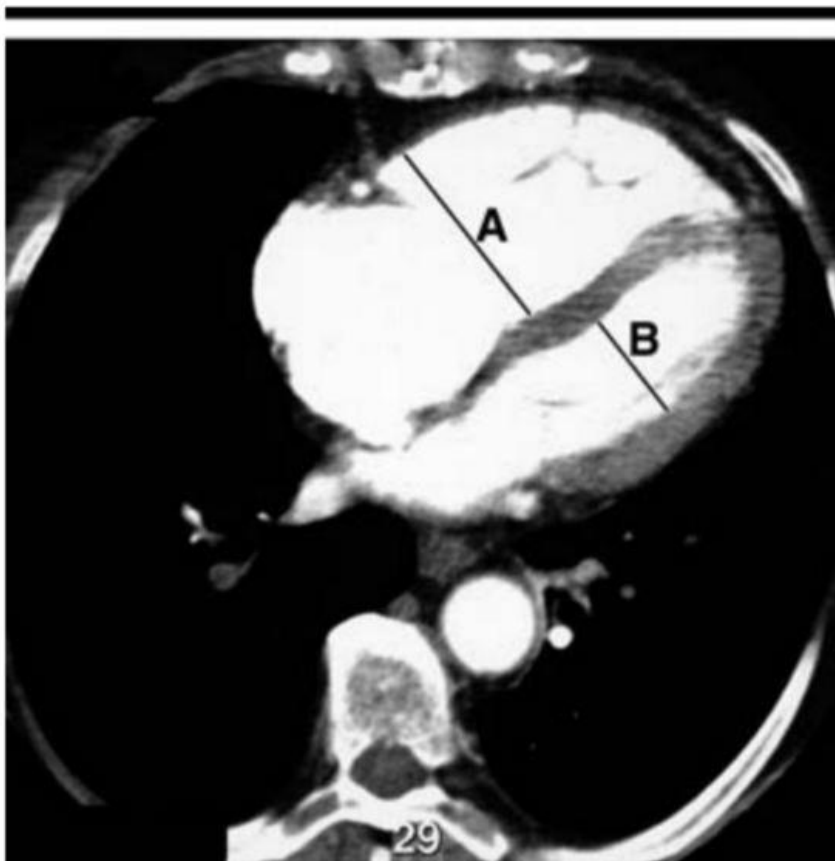


Figure 1. Transverse contrast-enhanced CT scan shows maximum minor axis measurements of the right ventricle (*A*) and left ventricle (*B*). Note the flattening of the interventricular septum. RV/LV ratio = 1.81.

