

Point-of-care echocardiography

MOVING BEYOND THE BASICS OF ECHOCARDIOGRAPHY

Core point-of-care echocardiography applications include assessing for pericardial effusion, and evaluation of ejection fraction, and right ventricular size.

Advanced point-of-care echocardiography applications:



Cardiac arrest



Endocarditis



Valve assessment



Right-heart function



Cardiac tamponade



Diastolic function



Wall motion abnormalities



Advanced echo applications are among the most complex in point-of-care ultrasound.



Caveats

- 1. Many advanced applications will not have a yes or no answer for the operator. Findings may exist on a spectrum.
- 2. Consider the pre-test probability of a disease when interpreting your results.
- 3. Use a targeted approach. Most users will not look for all abnormalities in a given patient.
- 4. Point-of-care echo findings are typically more specific than sensitive.
- 5. Point-of-care echo does not replace comprehensive echo. A comprehensive study will often be needed if a point-of-care echo is inconclusive.
- 6. Be wary of false positive findings. Inexperienced operators are more likely to over-diagnose a low quality image or to have false positives.
- 7. Work collaboratively with cardiologists and other clinicians; if you see a concerning finding, be sure to alert others involved in the patient care, but get lots of practice and build your reputation for quality studies and prudent interpretations.