

Cardiac Testing Requirements 3.18.20 1600

Spectrum Health contacts: Jeff Decker, MD, David Langholz, MD, and James Januzzi Jr. MD

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General principles when considering cardiac lab testing and cardiac imaging in known or suspected COVID-19 patients

Appropriate utilization of cardiac lab diagnostics (ACC home page: Troponin and BNP Use in COVID-19 patients):

- Hs-Trop: Do not order or check unless there is clinical concern for AMI. Frequent elevations of hs-trop are expected with majority representing myocardial injury. Minimizing utilization to only clinically suspected AMI will decrease utilization of TTE.

“Given the frequency and non-specific nature of abnormal troponin results among patients with COVID-19 infection, clinicians are advised to only measure troponin if the diagnosis of acute MI is being considered on clinical grounds and an abnormal troponin should not be considered evidence for an acute MI without corroborating evidence.”

Pro-BNP (only check in HF suspected patients):

- “Patients with COVID-19 often demonstrate significant elevation of BNP or NT-pro BNP. The significance of this finding is uncertain and should not necessarily trigger an evaluation or treatment for heart failure unless there is clear clinical evidence for the diagnosis.”

Considerations for Echo:

- Judicious ordering of TTE
- Importantly: Will the study change management?
 - If patient with suspected Covid-19: can the study wait until results back?
- Can POCUS be performed to answer the clinical question and/or guide need for TTE?
 - If TTE required, can limited study answer the question; minimize study length?

Recommendations/protocol from Brigham and Women’s Hospital (updated 3/23/20):

Transthoracic Echo (TTE): Do not order routine TTEs on COVID-19 patients.

- Cardiology consult or a trained provider should perform POCUS if
 - Significant troponin elevation or decline in ScvO2/MvO2
 - Shock
 - New heart failure (not pre-existing heart failure)
 - New persistent arrhythmia
 - Significant ECG changes

If abnormalities are identified on POCUS (e.g. new reduction in LVEF < 50%), a formal TTE should be considered. Cardiology consult as needed

- Where appropriate, order limited TTEs instead of full TTEs to shorten study length.

Transesophageal Echo (TEE)

- All TEEs will be reviewed on a case by case basis to determine essential nature of the study
 - Can TTE answer the clinical question?
 - Will TEE impact or change immediate or short-term patient management?

Stress Testing

- Stress testing is likely not indicated in individuals with active or suspected COVID.
- Any question of possible stress testing should be directed to cardiology