

Dear Colleagues,

Rapidly developing SARS-CoV-2 (COVID19) pandemic requires effective and safe provision of healthcare services while fulfilling our mission to care for the ill.

Vascular Laboratory is providing summary of guidance to Cleveland Clinic providers and sonographers regarding vascular testing during COVID19 Outbreak.

Objective of these recommendations is to help ordering providers while protecting our patients and sonographers during vascular testing. Key points of the recommendations are aligned with American Society of Echocardiography statement on Protection of Patients and Echocardiography Service Providers during the 2019 Novel Coronavirus Outbreak.

Content:

1. Guidance for providers: priority of testing
2. Guidance for vascular lab personnel: imaging protocol in confirmed or suspected COVID-19 patients
3. Guidance for vascular lab personnel: protection

Priority of testing

Putting high priority on safety of patients and sonographers in rapidly evolving COVID19 outbreak requires careful assessment of indication, priority and timing of testing. As potential surge of patients may result in reduced availability of staff, prioritization of testing will allow safe and efficient use of available resources.

In keeping with above considerations, vascular testing should **not** be performed if the results would not provide immediate clinical benefit, and if a test could be safely delayed until after the resolution of the COVID19 outbreak. In order to prioritize the studies it is suggested we identify “non-elective” (urgent/emergent) studies and defer other testing at this time.

Non-elective studies include the following:

- Test cannot be postponed due to risk to the patient’s life or the threat of permanent dysfunction
- Diagnosis and management cannot be established without the test results
- Results are essential for the evaluation of a condition with rapid clinical deterioration
- Results are needed for urgent/emergent procedures or surgeries
- Test is required for post-surgical evaluation and cannot be postponed

Repeat venous duplex US is discouraged if recent testing in other departments or facilities is available.

We suggest postponement of surveillance vascular testing on clinically stable patients if appropriate.

Protocols: imaging in confirmed or suspected COVID-19 patients

Objective is to minimize scanning time while obtaining images of highest possible quality.

- Exams should be as focused as possible to obtain diagnostic views but comprehensive enough to avoid return for additional images
- Exam should be tailored to the indication
- Advance planning with review of prior imaging and other available vascular imaging
- No measurements are conducted during image acquisition; all measurements are to be performed outside of COVID19 patient's room
- Study editing must be conducted outside of COVID19 patient's room
- Study should not be performed by a novice sonographer /technologist in training /student

Protection

1. Personnel

Imaging is performed in compliance with standards of prevention of virus spread.

All personnel must follow Standard Precautions and Transmission-Based Precautions according to the CDC recommendations and the institutional policy.

- Standard Precautions pertinent to COVID19 infection include hand washing with soap and water for at least 20 seconds or using alcohol based hand rub (ABHR) with 60-95% alcohol, and use of gloves
- Transmission-Based Precautions include use of PPE (gown, gloves, respirator or facemask, eye shield, head cover) according to the institutional policy and level risk.

Training of sonographers in the use of PPE

- when to use PPE
- what PPE to use
- how to appropriately don, use and doff PPE
- how to dispose, or disinfect and maintain PPE

2. Equipment

Equipment care is important to prevent transmission of the virus. Please consult with manufacturer's recommendation's regarding cleaning and disinfection of the diagnostic equipment. Vascular machines and probes should be thoroughly cleaned, ideally in the patient's room and again in the hallway.

3. Working environment

Considering the risk of transmission, it is important to assure regular cleaning of keyboards, monitors, mice, chairs, phones, desktops and door knobs in technologists' and reading rooms. It is also advisable to implement social distancing, remote review of imaging, and use of virtual platforms to decrease risk of transmission.