

# The day after tomorrow: echocardiography laboratories after the COVID-19 outbreak

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Statements of several cardiology societies on protection of patients and echocardiographers during the coronavirus disease 2019 (COVID-19) outbreak have been published.<sup>1–3</sup> COVID-19 has changed the way in which echocardiographic studies are performed.

The spread of the virus in Spain has been impressive, with dramatic consequences for our healthcare system. At present there is stable intracommunity transmission with small outbreaks focused on hospitals and nursing homes. We need to stop transmission during medical activities. In our institution, we have introduced simple but effective measures to reduce virus transmission during echocardiography. These measures are similar to the recommendations of European and American societies during the pandemic, but, in order to prevent new outbreaks, we have to go further.

General cardiologists can perform an echocardiogram in their consulting room, and only patients who need a study performed by an expert echocardiographer are referred to the laboratory. This allows us to reduce medical visits and the risk of COVID-19 transmission. Before entering the echocardiography lab, the patient is interrogated by a nurse about COVID-19 symptoms. If the patient has symptoms, echocardiography is postponed and the patient is referred to the emergency department to rule out COVID-19. In transthoracic studies, echocardiographers should wear a surgical mask, disposable gown, and gloves. Patients have to wear a surgical face mask. The study should be performed from the right side. If the study is performed from the left side, we recommend that echocardiographers should wear protective glasses or a face shield. Transoesophageal echocardiography (TOE) and exercise echocardiography are consid-

ered high-risk procedures because of aerosolization. Thus, all patients must show a negative polymerase chain reaction (PCR) test 24–48 h previously. However, since the PCR test has a sensitivity of ~70% in symptomatic patients<sup>4,5</sup> and indeed this could be lower in asymptomatic patients, we recommend that even with PCR-negative patients referred for TOE, echocardiographers should wear gloves, an N95 face mask, a face shield or protective glasses, and an isolation gown.

With these simple measures, we have returned to normal activity since the end of April with no COVID-19 cases among our staff or patients. Protection of patients and physicians definitely works.

**Conflict of interest:** none declared.

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