Emergency Physicians Also Knocking on the Door of Echocardiography

Los médicos de urgencias también llaman a la puerta de la ecocardiografía

To the Editor,

We thank García Fernandez for his excellent editorial on echocardiography performed by noncardiology specialists. 1 We would like to add that emergency physicians are also a group of professionals with a strong interest in improving the quality of our care through the application of noninvasive techniques such as basic clinical echocardiography, particularly for assessing patients with acute heart failure. In 45% of admissions, there is no echocardiographic information available. Although this lack of information is not associated with a worse prognosis in the emergency room, we believe that it may lead to underuse of basic treatments with a recognized prognostic benefit. 2 It would therefore seem to be common sense to introduce basic bedside echocardiography in the assessment of acute heart failure for certain selected patients. 3 Thus, in our tertiary university hospital, which serves 1.5 million inhabitants, we have set up a training program in basic echocardiography with the following aims: detection of pericardial fluid, subjective estimation of ventricular function, assessment of presence of segmentary wall movement disorders, and measurement of chamber size. The training comprised a part dedicated to theory (8 hours covering the principles of ultrasound scans and basic echocardiography) and a part to practice (25 to 30 echocardiographic studies under the supervision of cardiologists who work in the emergency room). The degree of satisfaction and acceptance of the technique was excellent; the extent to which the technique was applied in clinical practice was high. The main objective of echocardiography was subjective estimation of left ventricular function in 49%, detection of pericardial fluid in 33%, and assessment of shock and intravascular volume in 18% of cases. We also found that the learning curve was very steep, with appropriate choice of axis and identification of pericardial fluid in the first 5 echocardiographic studies. In addition, even in this short training period, participants were able to make a subjective assessment of cardiac contractility, segmental contraction defects, and dilation and size of atria and ventricles. All this information may help decide whether a patient with acute heart failure and previously undetected impaired ventricular contraction may benefit from a full work-up in the cardiology department. We should, however, be aware that our basic echocardiographic studies are in no way a substitute for those performed by specialists. We cannot stem the tide.

Javier Jacob,* Ferran Llopis, Xavier Palom, and Ignasi Bardes

Servicio de Urgencias, Hospital Universitari de Bellvitge, IDIBELL, L’Hospitalet de Llobregat, Barcelona, Spain

*Corresponding author:
E-mail address: jjacob@bellvitgehospital.cat (J. Jacob).

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