Letter to the editor on the original article: the evolution of cardiac point of care ultrasound for the neonatologist

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To the Editor:

We read, with great interest, the article entitled *The evolution of cardiac point of care ultrasound for the neonatologist* by Singh et al. [1]. The Hemodynamic Consultation (HC) Program started in Mexico City in 2017 [2]. Later that year, the lung ultrasound (LUS) technique was introduced, and the SAFE Protocol (Sonographic Algorithm for life threatening Emergencies) was included in the curriculum of the Neonatology Fellows (NF) [3]. The cardiac POCUS included is a subcostal long axis from posterior to anterior sweep and a 4-chamber view to identify tamponade, myocardial dysfunction, a deep central line, and the left and right ventricular outflow (Qualitatively with 2D and color Doppler). This allows for emergency drainage and/or consult to the expert model (Cardiology Department or HC).

Apart from the 455 HC (2018–2020), the protocol was performed on 12 patients (median gestational age 37, range 27–40) diagnosing: pneumothorax (7), pleural effusion (2), myocardial dysfunction (1), tamponade (1), and one case assisting resuscitation maneuvers (1). SAFE was performed by an expert physician (5), supervised NF (5), and exclusively by NF (2). Ten procedures were performed including lifesaving tension pneumothorax and tamponade drainage by NF on call. One hundred percent of patients survived the event and 70% until discharge. Corresponding radiographies were registered 20–91 min after the ultrasonographic diagnosis.

As a middle-income country starting with HC (expert model) and POCUS (general competency), we believe that an integrated, preferably single probe protocol can be part of NF training in academic programs. We have included LUS as a universal skill. We agree with the authors that the extent of Cardiac POCUS needs to be individualized by the center needs in close collaboration with Cardiology and Radiology to ensure quality care.

Availability of data and material Any additional data are available with authors and are available upon request.

Declarations

Conflict of interest The authors declare no competing interests.

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