Supplementary

Table S1 Competence assessment heart ultrasound from focus intensive care echocardiography

Parameters

Obtains optimised images at PLAX, PSAX, A4C and subcostal windows

Identifies anatomy in each window (chambers, walls, valves, great vessels, pericardium, lung)

Comments accurately on adequacy of each view

Demonstrates how, individually, sliding, tilting in long and short axises changes the views

Identification of dilated LV (LVEDD >6 cm)

Identification of LV dysfunction—reduced wall thickening & motion (global & regional), MAPSE Identification of RV dysfunction (visual impression and TAPSE)

Identification of dilated RV

Identification of D shaped septum and paradoxical septal motion

Identification of hyperdynamic heart Identifies, or able to describe, appearances of aortic dissection

Identification of pericardial effusion Identification of pleural effusion

Measures IVC accurately in 2D and M mode and identifies respiratory variation

With reference from (18).

Table S2 Standardised echocardiography assessment used in the study

Parameters

Left ventricle (LV)

LV size, wall thickness, LV ejection fraction (2D biplane)

Regional wall motion abnormality

LV diastolic dysfunction-E/A ratio, e' velocity of the mitral annulus, E/e'

Left ventricular outflow tract (LVOT)

LVOT gradient

Diameter of annulus, aortic root, sinotubular junction and proximal ascending aorta

Right ventricle

RV size, RV systolic function by TAPSE, RV systolic function

Valvular assessment

Valvular regurgitation: valve morphology and motion, presence of calcification/thickening, color Doppler, vena contracta, proximal isovelocity surface area

Valvular Stenosis: transvalvular peak velocities, maximum and mean pressure gradients, valve area by continuity equation

With reference to the European Society of Cardiology standardisation of report guideline (19).

References

- Intensive Care Society. Focused Ultrasound for Intensive Care, website. Available online: https://www.ics.ac.uk/ICS/FUSIC/ ICS/FUSIC/FUSIC_Accreditation.aspx, Accessed September 08, 2020.
- Galderisi M, Cosyns B, Edvardsen T, et al. Standardization of adult transthoracic echocardiography reporting in agreement with recent chamber quantification, diastolic function, and heart valve disease recommendations: an expert consensus document of the European Association of Cardiovascular Imaging. Eur Heart J Cardiovasc Imaging 2017;18:1301-10.