

controls were studied. Echocardiographic right heart image in apical plane were analysed by conventional manual tracing by 2D strain software (EchoPac). Myocardial strain was determined at the basal, mid and apical segments of the RV free wall and ventricular septum by 2D strain imaging, as well as conventional Doppler echocardiographic measurements.

Results Although there are difference on M-mode, 2D and traditional Doppler echocardiographic parameters between PAH and controls, RV six segments average peak strain were significantly reduced in patients with pulmonary arterial hypertension compared with normal controls and were most altered in patients with the most severe clinical WHO function classification ($p < 0.01$ for all).

Conclusions Quantitation of global and regional RV function with angle-independent 2D strain as well as conventional Doppler echocardiography can be helpful to understand right heart change with pulmonary arterial hypertension and will be helpful for clinical treatment.

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ASSESSMENT OF RIGHT HEART FUNCTION IN THE PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION USING 2D STRAIN ECHOCARDIOGRAPHY

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Objective This study sought to demonstrate that 2D strain echocardiography can be used to assess right ventricular (RV) global and regional systolic function and to assess the correlation with clinical WHO heart function.

Methods Twenty-five patients with pulmonary arterial hypertension (23 women; mean age 46.9 ± 15.5 years) and 19 normal