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**INACCURACY OF DOPPLER ECHOCARDIOGRAPHY
DIAGNOSES MILD CONGENITAL HEART DISEASE
RELATED PULMONARY HYPERTENSION**

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Objective To determine the diagnose accuracy of mild congenital heart disease-related pulmonary hypertension with Doppler echocardiography and heart catheterisation examination.

Methods The clinical data of mild congenital heart disease related pulmonary hypertension patients were collected and

analysed. All patients were performed both Doppler echocardiography and heart catheterisation examination with different doctors. For Doppler echocardiography, pulmonary artery systolic pressure (PASP) and trans tricuspid regurgitation were on priority watch list.

Results There were 11 males and 14 females with mean age of 31.76 ± 23.05 years old. The patients distribution included seven atrial septal defect (ASD) patients, 13 patent ductus arteriosus (PDA) patients, three ventricular septal defect (VSD) patients, two patients with PDA+ASD. The pulmonary artery pressure was detected by heart catheterisation examination and the mean value was 29.4 ± 2.71 mm Hg. For Doppler echocardiography, there were three patients who were reported mild pulmonary hypertension according to the value of PASP, and one ASD patient with mean pulmonary artery pressure 27 mm Hg detected by heart catheterisation while Doppler echocardiography suggested PASP 58 mm Hg (moderate pulmonary hypertension). In the 25 patients, only 9 patients observed transtricuspid regurgitation and the rests reported no transtricuspid regurgitation.

Conclusions The accuracy of Doppler echocardiography to diagnose mild congenital heart disease related pulmonary hypertension may be quite low. Echocardiography doctors may pay more attention to the structure abnormality while ignored the widely existed pulmonary hypertension in congenital heart disease patients. Heart catheterisation examination is useful to detect the early stage of pulmonary hypertension secondary to congenital heart disease.