

ECHOCARDIOGRAPHY IN PULMONARY HYPERTENSION

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A group of patients with mitral stenosis /n = 31/ and with recurrent pulmonary embolism / n = 49/ underwent echocardiographic and haemodynamic examinations.

The echocardiographic examination of pulmonary valve /PV/ was successful in 71% and the measurement of right ventricular /RV/ wall thickness in 95,5% of patients. In patients with established pulmonary hypertension /PH/ we observed a tendency to increased RV wall thickness, the flattening of "e - f" slope and a diminished "a" dip on pulmonary valve echocardiograms. A correlation between these parameters and mean pulmonary artery pressure was found: $p < 0,001$, $< 0,01$ and $< 0,01$, respectively. We found higher RV preejection/ejection time ratio ($p < 0,001$), significantly increased RV dimension ($p < 0,001$) and higher ratio of RV/left ventricular dimension ($p < 0,001$) in patients with pulmonary hypertension in comparison with those without PH.

We demonstrate a close relation between pulmonary haemodynamics and RV morphology and function in the study. Recently the Doppler and contrast echocardiography were introduced in examination of patients with suspect pulmonary hypertension.