

**Hakki Simsek, Dicle University, Faculty of Medicine, Cardiology Department.  
Diyarbakir, Turkey**

**Umit Sinan Yasar, Istanbul University, Faculty of Medicine, Cardiology Department.  
Istanbul, Turkey**

**Serkan Akdag, Memorial Hospital Cardiology Department. Diyarbakir, Turkey**

**Corresponding author: Hakki Simsek, Dicle University, Faculty of Medicine,  
Cardiology Department. Diyarbakir, Turkey**

### **Haemodynamic Assessment is Important in Patients with Congenital Heart Anomalies**

**Introduction:** PAH associated with adult CHD is included in group 1 of the PH clinical classification and represents a very heterogeneous patient population. Some malformations, such as patent ductus arteriosus, sinus venosus atrial septal defect or partial anomalous pulmonary venous return, are often concealed and patients are misclassified as suffering from IPAH.

**Case:** Twenty years old female was admitted outpatient clinic with palpitation. On her background there was no cardiac or any systemic history. On physical examination, there was systolic murmur on left second intercostal area and other system examination was normal. The blood pressure was 120/80 mmHg. The rhythm was sinus and there was right bundle branch block. Transthoracic echocardiography revealed secundum atrial septal defect, right heart chamber and pulmonary artery dilatation. Systolic function of both ventricles were normal. The systolic pulmonary artery pressure was 50 mmHg. No other anomaly detected on TTE. Then we decided to perform right heart catheterization to assess mean pulmonary artery pressure and pulmonary vascular resistance. On RHC, the mean PAP was 26 mmHg, PVR was 1.3 WU and pulmonary to systemic flow ratio (Qp/Qs) was 3.2. Although there was prominent left to right shunt in RHC, the mean PAP and PVR was not so high. We decided to perform transoesophageal echocardiography to look for another left to right shunt. And finally we found patent ductus arteriosus contributing to left to right shunt. The diameter of secundum ASD was 23 mm. We decided to close PDA first and then ASD sequentially. PDA was closed with ductal occluder. ASD will be closed soon.

**Conclusion:** In PAH patients associated with congenital heart disease the diagnostic algorithm should be applied carefully. Clinical, echocardiographic and hemodynamic findings were evaluated together. If there is discrepancy among these diagnostic methods, additional diagnostic tests such as TTE, CT, MRI should be performed.

