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255 IMPACT OF SEVERE VALVULAR HEART DISEASE IN ADULT CONGENITAL HEART DISEASE PATIENTS

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Background: The clinical impact of valvular heart disease (VHD) in adult congenital heart disease (ACHD) patients is unascertained. Aim of our study was to assess the prevalence and clinical impact of severe VHD (S-VHD) in a real-world contemporary cohort of ACHD patients.

Methods: Patients followed-up at our ACHD Outpatient Clinic were enrolled. Clinical characteristics and echocardiographic data were prospectively entered into a digitalized medical records database. VHD at the first access was evaluated and graded according to VHD guidelines. Clinical data at follow-up were collected. **Results:** A total of 390 patients were included and S-VHD was present in 101 (25.9%) patients. Over a median follow-up time of 26 months (IQR: 12-48), the primary composite endpoint occurred in 76 patients (19.5%). The cumulative primary endpoint-free survival was significantly lower in patients with S-VHD vs patients with non-severe VHD (Log rank p <0.001). At multivariable analysis, age and atrial fibrillation at first visit (p=0.029 and p=0.006 respectively), lower %Sat O2, higher NYHA class (p=0.005 for both), lower LVEF (p=0.008) and S-VHD (p=0.015) were independently associated to the primary endpoint. The likelihood ratio test demonstrated that S-VHD added significant prognostic value (p=0.017) to a multivariate model including age, severe CHD, atrial fibrillation, Sat O2, NYHA, LVEF and right ventricle systolic pressure>45 mMHg.

Conclusion: In ACHD patients, the presence of S-VHD is independently associated with the occurrence of cardiovascular mortality and hospitalization. The prognostic value of S-VHD is incremental above other established prognostic markers.