

P-5:

Carcinoid Heart Disease in Patients with Bronchopulmonary Carcinoid

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BACKGROUND: While carcinoid heart disease (CaHD) develops in up to 70% of patients with carcinoid syndrome, no prior study has reported the prevalence of CaHD in bronchopulmonary carcinoid. We aimed to estimate the prevalence of CaHD in bronchopulmonary carcinoid and to determine its predilection for left-sided cardiac valves.

METHODS: All patients with a pathologic diagnosis of bronchopulmonary carcinoid and echocardiogram performed at our institution between 2001 and 2016 were retrospectively reviewed. All echocardiograms were reviewed by 2 cardiologists for features of CaHD including valvular leaflet thickening and retraction with resulting regurgitation and/or stenosis.

RESULTS: Bronchopulmonary carcinoid was present in 207 patients (age 67±12years, 64% women). Carcinoid syndrome was present in 21 (10%) and liver metastases recognized in 19 (9%). Two (1%) patients had echocardiographic features of CaHD. One patient was a 62-year-old woman who underwent resection of stage 1A bronchopulmonary carcinoid without carcinoid syndrome and also received 7 months therapy with dexfenfluramine. The tricuspid septal and mitral anterolateral leaflets were mildly thickened and retracted, with mild and moderate regurgitation respectively. During 10 year follow-up, mitral regurgitation decreased and tricuspid regurgitation remained stable, a course more consistent with diet-drug related valve disease than CaHD. The other was a 71-year-old woman post resection of a grade 1 hilar carcinoid tumor

with carcinoid syndrome, liver metastases, and elevated 5-HIAA. Tricuspid and pulmonary valves had typical thickening and retraction with severe regurgitation and mild stenosis. The aortic valve was mildly thickened and retracted with mild regurgitation. A PFO was present. She underwent tricuspid and pulmonary valve replacement with PFO closure. Pathologic examination of the resected valves confirmed features of CaHD.

CONCLUSION: Bronchopulmonary carcinoid was associated with neither CaHD in the absence of liver metastases nor left-sided valve involvement in the absence of PFO. No relationship between left-sided valve involvement and bronchopulmonary carcinoid was demonstrated.