

with a high transpulmonary gradient pressure, systolic pulmonary arterial pressure 85 mmHg, medium pulmonary arterial pressure 53 mmHg, pulmonary arterial wedge pressure 12 mmHg and pulmonary vascular resistance 9,56WU. Vasoreactivity test with adenosine was negative. Pulmonary arteriography detected diffuse flow amputation of peripheral pulmonary arteries without thrombus. An extended workout excluded other causes of pulmonary hypertension. Oral anticoagulant, diuretic and specific pulmonary vasodilator drugs were recommended. The patient improved the functional class and remains stable. **Conclusion:** Ac-tinic pulmonary endarteritis is a possible cause of pulmonary hypertension in patients submitted to thoracic radiotherapy in past.

#### PREVALENCE OF PULMONARY CIRCULATION ABNORMALITIES IN LIVER TRANSPLANTATION CANDIDATES

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**Background:** The early identification of abnormalities in the pulmonary circulation is essential in patients with end-stage liver disease. The most important findings in this setting are the hepatopulmonary syndrome (HPS) and the portopulmonary hypertension (PPH). **Purpose:** To determine the prevalence of HPS and PPH in hepatic transplantation candidates. **Methods:** In a retrospective fashion, we evaluated all patients with advanced liver disease (liver transplantation candidates) that have been evaluated in pulmonary circulation outpatient clinic, from January 2005 to December 2007. Inclusion criteria were performed blood gas analysis and transthoracic Doppler echocardiography. We used European Respiratory Society Task Force on Pulmonary-Hepatic Vascular Disorders diagnostic criteria to HPS and PPH. **Results:** A total of 140 cirrhotic patients were included in our study; 88 males (62.9%), mean age of 54.8 years (SD  $\pm$  11.5, range 21 to 74 years). Main arterial blood analysis data were PaO<sub>2</sub> 94.5 mm Hg (SD  $\pm$  15.3, range 55 to 128.7 mm Hg) and Alveolar-arterial gradient 12.9 mm Hg (SD  $\pm$  11.7, range 0 to 50.7 mm Hg). Doppler echocardiography detected intrapulmonary shunt in 104 patients (75.7%). However, hepatopulmonary syndrome was diagnosed in only 47 patients (33.6%). Right ventricle systolic pressure was estimated in only 80 patients (mean 33.5  $\pm$  9.5 mm Hg, range 20 to 79 mm Hg). Seven patients (5%) had signs of pulmonary hypertension on Doppler echocardiography. Right heart catheterization was performed in 10 patients: no PH in 6 patients, high flow circulatory status in 3 patients, and PPH in 1 patient. True prevalence of PPH in this study was 0.7%. **Conclusions:** Hepatopulmonary syndrome is a common pulmonary circulation abnormality in

liver transplant candidates. Further, pulmonary hypertension is uncommon condition, and hyperdynamic circulatory state is more frequent hemodynamic pattern than portopulmonary hypertension.

#### COMPARISON BETWEEN TRANSTHORACIC DOPPLER ECHOCARDIOGRAPHY AND RIGHT HEART CATHETERIZATION FOR PULMONARY HYPERTENSION EVALUATION

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**Background:** Pulmonary hypertension (PH) is either an idiopathic condition or can be associated with several pathologies. Transthoracic Doppler echocardiography (D-echo) is a screening test for PH and has a good accuracy in this setting. However, this is an operator-depending method having as a drawback potential disagreement with the right heart catheterization (RHC) findings. **Purpose:** To compare Doppler echocardiography and right heart catheterization data in a group of patients with a clinical suspicion of PH. **Methods:** In a retrospective fashion, we evaluated all patients that underwent to transthoracic D-echo and RHC to investigate PH from January 2005 to December 2007. Pulmonary hypertension was diagnosed by RHC (gold standard method) if mean pulmonary arterial pressure (mPAP) was more than 25 mm Hg. To calculate accuracy of D-echo, we use tricuspid regurgitation velocity (TRV)  $\geq$  2,8 m/s to define PH case. **Results:** Eighty one patients were included, 45 women (55.5%), mean age of 51.3 years (SD  $\pm$  15.9; range 16 to 78 years). Main etiologies of PH were thromboembolic disease (n=18, 22.2%) and lung disease (n=12, 14.8%). Pulmonary hypertension prevalence in this group was 76.5%. No major complications were reported in RHC. Doppler echocardiography sensitivity, specificity, positive and negative predictive values were, respectively, 84.1%, 50.0%, 85.5% and 47.4%. All false-negative D-echo were mild PH cases by RHC (range mPAP 26 to 38 mm Hg). **Conclusions:** Right heart catheterization is a major step during the evaluation process of patients with pulmonary hypertension previously evaluated with transthoracic Doppler echocardiography. It is a safe method, with no serious complication in this series. Further, RHC avoids many incorrect diagnosis of pulmonary hypertension, and describes the hemodynamic profile and severity of PH.

#### PULMONARY THROMBOENDARTERECTOMY IN CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION: INITIAL EXPERIENCE OF HOSPITAL DE CLINICAS DE PORTO ALEGRE

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