61.53 ± 16.75 years, men 292 (42,5%). Symptoms begun before admission in 330 cases (48%) and after admission in 357 (52%). In 120 patients (17.5%), PE was objectively confirmed, in 193 (28.1%) was objectively excluded, but in 374 cases (54.4%) diagnostic approach was incomplete. In-hospital mortality was 19.1% (n =143). In multivariate analysis, hypotension (beta 2,49, IC95% 1,35-4,63), PE objectively confirmed (beta 2,199, IC95% 1,15-4,21), non-conclusive approach (beta 1,70, IC95% 1 – 2,87), cancer (beta 2,868, IC95% 1,80-4,45), secondary PE (beta 1,57, IC95% 1,02-2,41), inclusion in 1996-1997 (beta 1,71, IC95% 1,15-2,67) and thoracic or abdominal infection (beta 1,71, IC95% 1,08-2,71) were associated with highest in-hospital mortality (p<0,05). **Conclusion:** Patients with acute pulmonary thromboembolism objectively diagnosed have higher mortality than patients with objectively excluded PE. Further, non-conclusive approach of PE was an independent risk factor for in-hospital death.

PO387 PULMONARY HYPERTENSION IN ONE PATIENT SUBMITTED TO THORACIC RADIOTHERAPY IN CHILDHOOD. IS ACTINIC PULMONARY ENDARTERITIS POSSIBLY THE LINK?

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PALAVRAS-CHAVE: PULMONARY HYPERTENSION; RADIATION THERAPY; WILM\'S TUMOR

Background: Radiotherapy has been related to abnormalities in lung parenchyma and vasculature. Lung fibrosis and pneumonitis are the most common described lesions. There are few cases of pulmonary endarteritis secondary to chest radiotherapy published in medical literature. **Purpose:** To report a case of an adult patient with severe pulmonary hypertension that has been submitted during childhood to thoracic radiotherapy to treat lung metastasis of Wilms tumor. **Case Report:** Patient is a twenty-nine years-old male with Wilms tumor at the age of one, submitted to surgery and abdominal radiotherapy. Four years later, thoracic radiotherapy was done to treat pulmonary metastasis. A complaint of exertional dyspnea was noticed about 7 years ago. At that time, pulmonary hypertension was diagnosed by transthoracic echocardiogram and patient was put on diltiazem with symptomatic control. Patient was admitted at the hospital with functional class III and signs of right cardiac failure. Further complementary evaluation with chest high resolution computed tomography and pulmonary function test were compatible with interstitial lung disease. Haemodynamic measures confirmed severe pulmonary hypertension 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 9,56 WU. 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. **Discussion:** Pulmonary tissue is very sensible to radiation. Lung irradiation could inhibit vascular and alveolar proliferation impairing lung growing. Pulmonary hypertension has been described in patients with lung fibrosis preceding pneumonitis (Abratt P et al, Clin Chest Med 2004; 25:167-77). The actinic endarteritis has also been related to pulmonary hypertension after radiotherapy (Butler P et al, BMJ 1981; 283; 1365). To establish the diagnosis, lung biopsy is required, however is a high risk procedure in severe pulmonary hypertension. In this case, due to the relatively non-severe lung damage in comparison to the severity of the pulmonary hypertension, actinic endarteritis needs to be considered. **Conclusion:** Actinic pulmonary endarteritis is a possible cause of pulmonary hypertension in patients submitted to thoracic radiotherapy in past.

PO388 COMPARISON BETWEEN TRANSTHORACIC DOPPLER ECHOCARDIOGRAPHY AND RIGHT HEART CATHETERIZATION FOR PULMONARY HYPERTENSION EVALUATION

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PALAVRAS-CHAVE: PULMONARY HYPERTENSION; CARDIAC CATHETERIZATION; ECHOCARDIOGRAPHY

Background: Transthoracic Doppler echocardiography(D-echo) is a screening test for pulmonary hypertension(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 D-echo and RHC 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 Jan 2005 to Dec 2007. PH was diagnosed by RHC if mean pulmonary arterial pressure(mPAP) was more than 25 mm Hg. To calculate accuracy of D-echo, we use tricuspid regurgitation velocity(TRV) > 2,8 m/s to define PH case. Statistical analysius was done with Student T test, Fisher exact test, qui-square, Pearson correlation test, Spearmann correlation test. Level of significance was 5% (bilateral). **Results:** Eighty one patients were included, 45 women (55.5%), mean age of 51.3 years(SD±15.9 years). Main etiologies of PH were thromboembolic disease(22.2%) and lung disease(14.8%). Pulmonary hypertension prevalence in this group was 76.5%. No major complications were reported in RHC. There was a moderate correlation between mPAP and TRV(r=0.69,p<0.01), however a poor correlation between RV diameter and mPAP(r=0.28,p=0.013). 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 diagnostic process of patients with PH previously evaluated with transthoracic Doppler echocardiography. Further, RHC avoids many incorrect diagnosis of PH, and describes the hemodynamic profile and severity of PH.

PO389 PREVALENCE OF PULMONARY CIRCULATION ABNORMALITIES IN LIVER TRANSPLANTATION CANDIDATES

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PALAVRAS-CHAVE: LIVER TRANSPLANTATION; PULMONARY HYPERTENSION; HEPATOPULMONARY SYNDROME

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 at the pulmonary circulation outpatient clinic, from Jan 2005 to Dec 2007. We used European Respiratory Society diagnostic criteria to HPS and PPH (Eur Resp J 2004; 24:861). Statistical analysis was done with Fisher exact test, Student T test, qui-square test. Level of significance was 5% (bilateral). **Results:** A total of 140 cirrhotic patients were included in our study; 88 males (62.9%), mean age of 54.8 years (SD + 11.5). Doppler echocardiography detected intrapulmonary shunt in 104 patients (75.7%), nonetheless, hepatopulmonary syndrome was diagnosed in only 47 patients (33.6%). There was no association between HPS and Child-Pug score, etiology of cirrhosis and any other clinical-demographic variable. Seven patients (5%) had signs of pulmonary hypertension on Doppler echocardiography. Right heart catheterization was performed in 10 patients, with the following findings: 1 pt had PPH; 3 pts had high flow circulatory status, and 6 patients had no PPH. Then, prevalence of PPH in this study was 0.7%. **Conclusions:** Hepatopulmonary syndrome is a common pulmonary circulation abnormality present in liver transplant candidates. Pulmonary hypertension is an uncommon condition, and hyperdynamic circulatory state is a more frequent hemodynamic pattern than portopulmonary hypertension.