

Lung vascular disorders in liver transplant tertiary referral centers in Mexico

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We have read with interest the recent original contributions published in your journal regarding the experience of liver transplantation (LT) in some of the most important tertiary referrals centers in Mexico.¹⁻⁴ We would like to share some thoughts and concerns regarding the importance of the development of lung vascular disorders in the setting of liver disease/portal hypertension, since those disorders have been documented in the forms of portopulmonary hypertension (POPH) and hepatopulmonary syndrome (HPS),⁵ carrying significant morbidity and mortality, particularly in the perioperative setting of LT. Recent prospective studies have estimated the prevalence of POPH and HPS of 8.5% and 10-30%, respectively, especially in tertiary centers evaluating LT candidates.^{5,6}

We found that in one of the 55 patients transplanted in the San Jose Tec de Monterrey died in the postoperative day 2 from pulmonary hypertension (PH).¹ Also, interestingly, the UMAE 25 IMSS, they mentioned also among the cardiovascular complications and comorbidities of their patients the presence of tricuspid regurgitation in two of their candidates.³ This particular echocardiographic parameters estimates the right ventricular systolic pressures (RVSP), nowadays being consider a fundamental component in the screening for the diagnosis of and PH,⁷ and also for POPH in the pretransplant period, with the subsequent decision to perform right heart catheterization (RHC) in LT candidates. Based on this, we would like to share the following concerns/questions:

Do you have precise numbers regarding the prevalence of lung vascular disorders? Does a uniform common protocol among tertiary centers exist in regards to the initial screening in a timely manner with transthoracic echocardiography with agitated saline-based contrast, looking for POPH and HPS? Since the screening and perioperative management in LT candidates must involve a multidisciplinary approach team (e.g. transplant surgeons, hepatologists, pulmonologists, and anesthesiologists), have you been actively involved invasive cardiologists also to perform definitive diagnosis of POPH by performing RHC for gold standard diagnosis?, since this could have very important therapeutic and prognostic implications for potential suspected POPH in LT candidates.^{8,9}

Liver disease/portal hypertension are associated with dyspnea and hypoxemia by complex and various mechanisms, with lung vascular disorders conferring one of the greatest impact on prognosis. Given the significant and high prevalence reported lately in other LT tertiary referral medical centers located in Europe and the USA, We strongly recommend routine screening for POPH and HPS. We believe that increased awareness and active search for lung vascular disorders is critical in achieving better and optimal health-care and quality of life, with the ultimate goal of reaching a positive impact in survival of LT patients. We also encourage our colleagues to perform solid Mexican or Latin-American consensus or guidelines for the approach and management for lung vascular disorders in collaboration with natio-

nal medical societies and associations all together, like the first one performed by the European Respiratory Society in 2004.¹⁰

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