The role of pulmonary arterial wedge pressure in primary graft dysfunction
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Introduction: The presence of pulmonary hypertension (PH) before lung transplantation (LuTx) is a well known risk factor for primary graft dysfunction (PGD). However, the role of the comprehensive cardiopulmonary hemodynamic assessed before LuTx is limited. We aimed to explore if other hemodynamic variables may have a role in PGD, besides absolute PH.

Methods: a retrospective study was conducted at Policlinico Hospital of Milan (Italy) on adults who underwent LuTx for any indication other than cystic fibrosis from 2011 to 2017. PGD was defined as PaO2/FIO2<300 with infiltrates at 72 hours after reperfusion. Two groups were identified by the presence of PGD (respectively PGD+ and PGD-). We compared the prevalence of PH and the median values of the following parameters collected through right heart catheterization: pulmonary arterial wedge pressure (PAWP), right atrial pressure (RAP), pulmonary vascular resistance (PVR) and cardiac index (CI).

Results: among 67 patients (57% male, median age 58 years), 28 (42%) had PGD. PH was prevalent in PGD+ group (57% vs 33%, p=0.045). PAWP showed the strongest difference (PAWP: 13.0 vs 10.0 mmHg, p=0.036), while RAP was slightly higher in PGD+ group (RAP: 7.0 vs 5.5 mmHg, p=0.048). No differences were observed between PVR or IC (PVR: 2.61 vs 2.62 UW, p=0.622; CI: 3.13 vs 3.07 l/min/mq, p=0.760).

Conclusion: our data confirm that PH is an important factor in PGD. However normal median values of PVR together with a higher median PAWP may suggest a predominant role of the post capillary component in this disease. From this point of view, RAP may reflect the overload of the right ventricle caused by higher total afterload. Thus, PAWP should be considered in PGD’s development.

Session:
Moving lung transplantation forward (Thematic poster)

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Thematic poster: Predicting the future: biomarkers of respiratory infection

**Disease(s):** Airway diseases, Respiratory infections, Respiratory critical care, Respiratory infections

**Method(s):** Cell and molecular biology, Public health, Respiratory intensive care, General respiratory patient care

**Chairs:** David Connell (London, United Kingdom), Rosario Menendez Villanueva (Valencia, Spain), Sebastian Ott (Bern, Switzerland), Oriol Sibila (Barcelona, Spain)

**PA2604** Pepsin as a biomarker of reflux in NAR patients
Rhianna Lenham (Kingston Upon Hull, United Kingdom), Rhianna Lenham, Qiuping Wang, Xi Wang, Peter Dettmar

**PA2605** Vitamin D and Bronchiectasis Severity Index (BSI): A correlation
Sebastian Ferri (Catania, Italy), Enrico Heffler, Raffaele Cannisi, Carlo Chessari, Claudia Crimi, Nunzio Crimi
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