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Title: Effect of obstructive lung disease on mosaic attenuation pattern in CTEPH patient

Dr. Emel 23684 Eryuksel emeleryuksel@yahoo.com MD ¹, Prof. Bedrettin 23685 Yildizeli byildizeli@marmara.edu.tr MD ², Dr. Cagatay 23686 Cimsit cagataycimsit@gmail.com MD ³, Dr. Sehnaz 23687 Olgun Tandogdu drsehnazolgun@yahoo.com MD ¹ and Prof. Sait 23688 Karakut saitkarakurt@hotmail.com MD ¹. ¹ Pulmonary and Critical Care, Marmara University, Istanbul, Turkey ; ² Thoracic Surgery, Marmara University, Istanbul, Turkey and ³ Radiology, Marmara University, Istanbul, Turkey .

Body: Pulmonary endarterectomy (PEA) is a choice of treatment in chronic thromboembolic pulmonary hypertension (CTEPH). Mosaic attenuation pattern (MAP) is a radiological finding in CTEPH and there are equivocal findings on its use to determine the intensity of the disease. Obstructive lung diseases can cause MAP and increase the extent of this finding in CTEPH patients. The effect of obstructive disease on the preoperative and postoperative pulmonary artery pressures (PAP) and pulmonary vascular resistance (PVR) in CTEPH patients with equal MAP findings are studied. Forty-one CTEPH patients who underwent PEA with equal MAP findings determined by high resolution CT (HRCT) scoring were retrospectively evaluated. Lung function tests were used to group the patients as obstructive and non-obstructive. Preoperative and postoperative PAP and PVR values were calculated and the hemodynamic relationship between MAP and CTEPH was evaluated. Patients' MAP values were equal (18/18). No difference was found between the obstructive group (Group I, n=11) and non-obstructive group (Group II, n=30) based on preoperative PAP (65 vs. 81, p=0.13). Preoperative PVR was significantly lower in Group I (598 vs. 880, p<0.001). Postoperative PAP was significantly lower in Group I compared to Group II (25 vs. 35, p<0.006). Preoperative PVR and postoperative PAP are lower in CTEPH patients with obstructive disease and MAP. Obstructive pattern is not a risk in PEA candidates with high MAP scores, and this group of CTEPH patients benefit more from PEA.