**ECHOCARDIOGRAPHIC EVALUATION OF PATIENTS WITH CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION BEFORE AND AFTER PULMONARY ARTERY ENDARTERECTOMY**

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Backgrounds: Chronic thromboembolic pulmonary hypertension (CTEPH) is a serious and under diagnosed disorder with significant morbidity and mortality. For reasons that are still unclear, the lyses of blood clots does not occur in some survivors with acute pulmonary thromboemboli which then evolve into organization of the clot inside the pulmonary artery and chronic thromboembolic pulmonary hypertension. Obstruction of pulmonary artery results in increased vascular resistance and then right heart strain and remodeling. Pulmonary artery endarterectomy is the treatment of choice with good outcome in these patients.

Objectives: The aim of the present study was to evaluate right ventricular function and pulmonary artery pressure before and then after pulmonary thrombo-endarterectomy. Methods: All clinical and echocardiographic data of fifteen patients with CTEPH were obtained before and after pulmonary thromboendarterectoy.

Results: The mean age of patients was 37± years (range: 18-55 years), 10(66.7%) were male. Pulmonary thromboendarterectomy was associated with significant improvement in right ventricular size (P=0.024), systolic pulmonary arterial pressure(85.77 ±24.48 versus 45.00±7.90 mmHg,P=0.012), functional exercise capacity (20% NYHA class I, 20% NYHA class II, 60% NYHA class III before operation and 46.7% NYHA class I, 40% NYHA class II,13.3 % NYHA class III after surgery, P=0.007), but right ventricular systolic function did not show significant improvement after that(moderate versus severe dysfunction in 45.5% and 54.5% before operation and 46.7% versus 53.3% post syrgery, p=0.83).

Conclusion: Pulmonary end-arterectomy is the method of choice for treatment of CTEPH with good long term results and acceptable mortality and morbidity.