**UNDERRATED AND DIAGNOSED: CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION(CTEPH)**

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**Introduction:** Chronic thromboembolic pulmonary hypertension (CTEPH) is a rare clinical entity characterized by an obstruction of the pulmonary arterial system and its association with venous thromboembolism (VTE). Recent data suggest CTEPH occurs in ≈5 individuals per million per year. The cure is pulmonary artery endarterectomy (PEA).The indications for PEA are still not well defined. We describe a patient after 5 years of having CTEPH requiring PEA.

**Case Report:** 56 year old woman with history of hypertension and asthma presented with dyspnea on exertion and lower extremity edema. Duplex scan revealed venous thrombosis of lower extremities. Computed tomography of chest showed acute pulmonary embolism. For 5 years, she was followed at a community institute on anticoagulation. Routine echocardiogram revealed elevated pulmonary arterial systolic pressure of (PASP) 120mmHg; she was started on sildenafil and referred to our institution for evaluation. Transthoracic echo confirmed an elevated PASP , normal left ventricular function, severely dilated right atrium(RA) and right ventricle (RV) that was moderately reduced in function with moderate tricuspid regurgitation. Ventilation perfusion scan revealed scattered multiple moderate to large wedge shaped perfusion defects throughout mid and upper lungs, subacute in etiology. A right heart catheterization revealed RA of 10, RV of 133/8 (13), PA 113/32(60), wedge pressure of 20 mm Hg with a mixed venous saturation of 60% yielding a cardiac output of 3.2 liters per minute and cardiac index of 2.1. After a multidisciplinary effort she was transferred to a university center for PEA. Post procedure PA pressure improved to 23/13(18). Her follow up echocardiogram 2 weeks post PEA revealed minimally dilated RV with no evidence of elevated PASP on echocardiogram.

**Conclusion:** This highlights a challenging clinical case associated with CTEPH patients and timely referral to expert centers for surgical consideration. Ongoing efforts to identify assessment of operability are needed. Clinicians must be committed as in this case which highlights the prospect of success after months of multidisciplinary care.