Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Complex Clinical Cases

NOVEL CTEPH MIMICKERS IN THE COVID-19 ERA

Poster Contributions
For exact presentation time, refer to the online ACC.22 Program Planner at https://www.abstractsonline.com/pp8/#!/10461

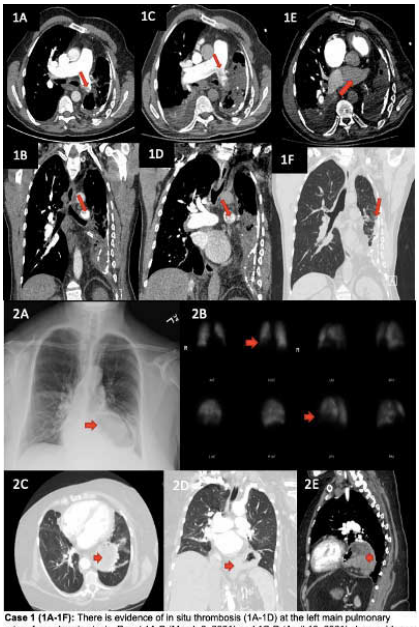
Session Title: Complex Clinical Cases: FIT Flatboard Poster Selections -- Pulmonary Vascular Disease
Abstract Category: FIT: Pulmonary Vascular Disease

Authors: *Rylie Pietrowicz, Estefania Oliveros Soles, Philip Lavenburg, Vladimir Lakhter, Riyaz Bashir, Yoshiya Toyoda, Paul Forfia, Anjali Vaidya, Temple University Lewis Katz School of Medicine, Philadelphia, PA, USA*

Background: We present two cases of novel chronic thromboembolic pulmonary hypertension (CTEPH) mimickers; hypoplastic left lung and large hiatal hernia.

Case: *Case 1:* A 56-year-old male with chronic hypoplastic left lung, ASD repair and PE presented with chronic dyspnea. CTA suggested CTEPH, and echocardiogram (TTE) suggested pulmonary hypertension (PH) which was confirmed by PA catheter. He was referred to our CTEPH program. *Case 2:* A 74-year-old female with heart failure with preserved ejection fraction (HFpEF) and remote PE presented with exertional dyspnea. Perfusion scan demonstrated left lower lobe defect, and TTE suggested PH which prompted referral to our CTEPH program.

Decision-making: *Case 1:* On our TTE review, the hemodynamic findings were consistent with ASD history, and on our CTA review, hypoplastic left lung was noted to be associated with stasis in situ thrombus in attenuated pulmonary vessels. No further thrombotic disease was noted elsewhere in the pulmonary circulation. *Case 2:* CTA did not reveal lining thrombus, filling defect, or intravascular web to suggest CTEPH. Her perfusion defect was determined to be from a large hiatal hernia and PH due to pulmonary venous hypertension from HFpEF.



Case 1 (1A-1F): There is evidence of in situ thrombosis (1A-1D) at the left main pulmonary artery from chronic stasis. Panel 1A-B (March 8, 2021) and 1C-D (April 10, 2021) show evidence of interval increase in the burden of intraluminal defects. Panel 1E demonstrates decreased venous return into the left pulmonary veins due to the atresia in the pulmonary vascular bed. Chronically scarred and atretic collapsed left lung (1F) with pleural calcification.
Case 2 (2A-2E): Chest X ray demonstrating gastric bubble above the diaphragm (2A). Abnormal perfusion lung scan: The perfusion images demonstrate abnormal perfusion, predominantly in the lateral and posterior segment of the left lower lobe (2B). Computed tomography revealed a large hiatal hernia compressing, causing the abnormal perfusion scan (2C-E).

Conclusion: For both cases described, the initial assessment led to a false impression of CTEPH, demonstrating the necessity of careful evaluation of multimodality imaging to prevent unnecessary morbidity and mortality with pulmonary thromboendarterectomy.