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AC092

Adult Cardiology & Clinical Cardiovascular Medicine • Poster Presentation

CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION PRESENTING AS UNEXPLAINED RIGHT HEART FAILURE IN A YOUNG NIGERIAN WOMAN: A CASE REPORT

Stand: POSTER #AC092 | **Venue:** Poster Exhibition Hall & Gallery - Eko Convention Centre |**Online Ref:** https://nigeriancardiacsociety.com/abstracts/AC092

Background: Chronic thromboembolic pulmonary hypertension (CTEPH) is an underrecognized cause of unexplained right heart failure, arising from incomplete resolution of pulmonary artery thrombus and progressive pulmonary vascular remodeling. Diagnosis is frequently delayed as early symptoms mimic more common cardiopulmonary conditions, particularly in young patients lacking classical thromboembolic risk factors.

Case report: A 42-year-old nulliparous woman presented with a two-year history of unprovoked left lower-limb swelling that resolved spontaneously, followed by progressive exertional dyspnoea, orthopnoea, and palpitations poorly responsive to conventional heart-failure therapy. Examination revealed elevated jugular venous pressure, a loud P2, S3 gallop, tricuspid regurgitation, hepatomegaly, and ascites. Echocardiography demonstrated severe pulmonary hypertension (RVSP 79.7 mmHg) with right ventricular dilatation and dysfunction (TAPSE 1.3 cm). CT pulmonary angiography identified chronic organized thrombus in the right pulmonary artery, and ventilation-perfusion SPECT showed mismatched perfusion defects with markedly reduced right lung perfusion (36.6%). Right heart catheterization confirmed precapillary pulmonary hypertension (mPAP 45 mmHg, PCWP 7mmHg) with markedly elevated pulmonary vascular resistance (14.6 WU), establishing a diagnosis of CTEPH. Concomitant primary hypothyroidism, complicated by treatment non-adherence, was identified during evaluation. The patient received anticoagulation and pulmonary vasodilator therapy, but financial constraints delayed pulmonary thromboendarterectomy, resulting in persistent right heart failure with recurrent ascites.

Conclusion: CTEPH should be actively considered in patients with unexplained pulmonary hypertension and right heart failure, regardless of age or absence of typical risk factors. Early multimodal diagnostic evaluation is essential, and socioeconomic barriers remain a significant obstacle to definitive surgical management in resource-limited settings.

Keywords: Chronic thromboembolic pulmonary hypertension, Right heart catheterization. Heart failure, right; pulmonary embolism; pulmonary endarterectomy; pulmonary hypertension; ventilation–perfusion scintigraphy