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Title: Lost in translation: Does radiological evidence of right ventricular strain in acute pulmonary embolism trigger echocardiographic follow-up?

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Body: Introduction: Pulmonary Hypertension (PH) is defined as raised Pulmonary Arterial Systolic Pressure ≥25mmHg at rest on Right Heart Catheterisation (ESC/ERS, 2009). Chronic Thromoboembolic Pulmonary Hypertension (CTEPH) is a complication of pulmonary embolism (PE), with a reported cumulative incidence of 3.1% at 1 year (Pengo et al, 2004). Patients with evidence of PH or Right Ventricular Dysfunction (RVD) during admission should undergo echocardiography after discharge (usually after 3-6 months) to establish PH resolution (ESC/ERS, 2009) Objective: To assess if radiological evidence of RVD affects follow-up after PE. Methods: Retrospective analysis of all patients diagnosed with PE on Computed Tomography Pulmonary Angiography (CTPA) in 2010 in a single Trust. CTPA reports were stratified according to presence or absence of RVD and echocardiography reports reviewed for signs of PH. Results: 19.3%(329/1702) of CTPA scans revealed PE: Central (28.6%); Submassive (28.0%); Peripheral (44.4%). Figure 1 summarises the main findings.

Conclusions: RV strain is often not commented on in CTPA reports. Despite low numbers in some groups, it seems radiological evidence of RVD may be useful in deciding which patients need echocardiography after acute PE.