

European Respiratory Society Annual Congress 2013

Abstract Number: 2772

Publication Number: P2607

Abstract Group: 4.3. Pulmonary Circulation and Pulmonary Vascular Disease

Keyword 1: Pulmonary hypertension **Keyword 2:** Comorbidities **Keyword 3:** No keyword

Title: Comparison of prevalence of diabetes mellitus in patients with idiopathic pulmonary arterial hypertension and distal chronic thromboembolic pulmonary hypertension

Dr. Charaka 9853 Hadinnapola charaka.hadinnapola@nhs.net MD ¹, Ms. Carmen 30066 Treacy carmen.treacy@papworth.nhs.uk ¹, Dr. Colm 30067 McCabe Colm.McCabe@papworth.nhs.uk MD ¹, Dr. Theodore 30068 Birks theodore.birks@nhs.net MD ¹, Prof. Dr Nicholas 30069 Morrell nwm23@medschl.cam.ac.uk MD ¹ and Dr. Joanna 30076 Pepke Zaba Joanna.PepkeZaba@papworth.nhs.uk MD ¹. ¹ Pulmonary Vascular Diseases Unit, Papworth Hospital NHS Foundation Trust, Cambridge, United Kingdom, CB23 3RE .

Body: Increased prevalence of diabetes mellitus (DM) in idiopathic pulmonary arterial hypertension (IPAH) has been described. It is also known to be a risk factor for acute venous thromboembolism. Distal chronic thromboembolic pulmonary hypertension (dCTEPH) shares histological features with IPAH. We compared the prevalence of DM in IPAH and dCTEPH. The Papworth Pulmonary Vascular Diseases Unit database identified patients with IPAH and dCTEPH from 01/01/2006 to 31/12/2012. Baseline characteristics at diagnosis were recorded.

Baseline characteristics

| | Distal CTEPH | IPAH |
|---|--------------|-------|
| n | 56 | 81 |
| % female | 57.1 | 61.7 |
| Age ^a | 64.1 | 58.6* |
| BMI ^a | 26.2 | 27.1 |
| dPAP ^a | 28.4 | 34.8* |
| mPAP ^a | 48.3 | 58.5 |
| Pulmonary capillary wedge pressure ^a | 11.1 | 11.6 |
| Diabetes mellitus ^b | 1.8 | 18.5* |
| Ischaemic heart disease ^b | 10.5 | 16.0 |
| Atrial fibrillation ^b | 8.8 | 9.9 |
| Systemic hypertension ^b | 17.5 | 28.4 |
| Hypercholesterolaemia ^b | 3.5 | 17.3* |

| | | |
|---------------------------------------|------|------|
| Obesity ^b | 21.4 | 32.5 |
| Obstructive sleep apnoea ^b | 0.0 | 6.2 |

^a mean; ^b %; * p<0.05

The prevalence of DM was significantly lower in the dCTEPH group compared to the IPAH group, despite the group being older and having similar BMIs. Limitations of this study are retrospective data collection and small population size. Within these limitations the prevalence of DM was lower in the dCTEPH group and higher in the IPAH group compared to the national prevalence (7.9%). The other characteristics are similar to published registries. The different phenotypes suggest distinct risk factors are involved in these conditions that otherwise share many pathobiological processes. Our findings are preliminary and need to be confirmed in a bigger cohort including patients with proximal CTEPH.