

# CHANGES IN REFERRAL RATES FOR PULMONARY ENDARTERECTOMY IN THE UK DURING THE LAST DECADE

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## Introduction

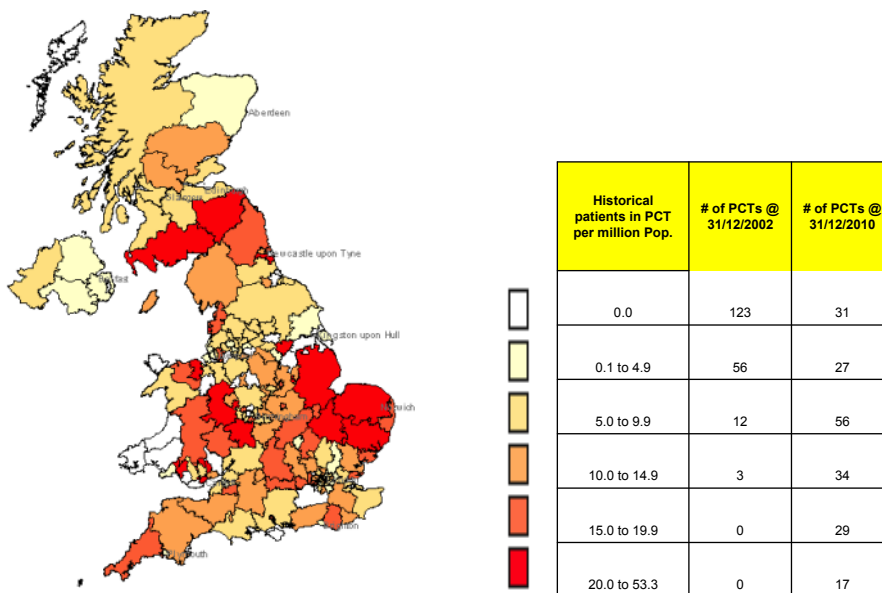
Pulmonary endarterectomy (PEA) is the treatment of choice for patients with proximal chronic thromboembolic pulmonary hypertension (CTEPH). The UK has a single centre performing this operation since 1997 and this programme became nationally funded in 2000. Patients were referred from seven specialist pulmonary hypertension centres.

## Method

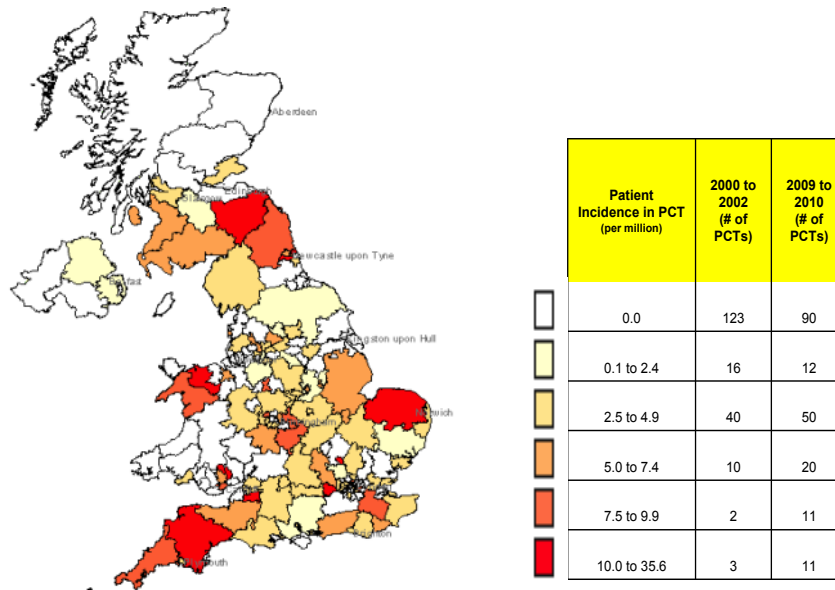
All 625 patients treated with PEA from 2000-2010 were mapped according to their primary care trust (PCT) and divided up into referral years. Mapinfo software was used to generate the referral maps. The two aspects that were analysed include historical accumulative/million population and incidence/million population, between the two periods 2000-2002(early) and 2009-2010

## Results

Fig.1 Accumulative historical data/million population up to the end of 31/12/2010



**Fig.2 New Patient Incidence per million population 2009-2010**



The data from the accumulative PEA historical mapping shows an increase in geographic coverage across UK with a reduction in the number of PCT's not referring patients for PEA from 123 in the period of 2000-2002 to 31 at the end of 2010.

The new patient incidence ranges from no referrals in 90 PCT's to 0.1-4.9 patients/million in 62 PCT's; 5.0-9.9 patient/million in 31 PCT's; 10-35.6/million in 11 PCT's between 2009 and 2010. From our PEA data mapping analysis we have calculated that the incidence of operated patients was 0.4 per million population in 2000 (n=22) and 2 per million population in 2010 (n=122).

## Conclusion

There has been a 5 fold increase in PEA activity in the UK over the last decade. However, even with increased awareness of CTEPH, there are still areas in the UK where no patients are referred for PEA. The analysis of our data is limited to surgical cases of CTEPH. The current incidence of PEA in the UK is already higher than historical estimation of the incidence of all CTEPH (0.1-0.5/million, Fedullo, *N Engl J Med* 2001,), and higher than data from recent follow up studies of patients with acute pulmonary embolism. Since 30% of patients with CTEPH have distal disease that is not treated surgically and some patients with proximal CTEPH do not proceed to surgery due to choice or co-morbidities, the overall incidence of CTEPH is likely to be significantly higher than previously suspected.

**Acknowledgements**

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