

Abstract S125 Figure 1

S126 DESCRIPTION OF PALLIATIVE CARE SUPPORT FOR COPD PATIENTS WITHIN PRIMARY CARE IN THE UK

¹CI Bloom, ¹B Slaich, ²L Smeeth, ³P Stone, ¹JK Quint. ¹Imperial College London, London, UK; ²London School of Hygiene and Tropical Medicine, London, UK; ³University College London, London, UK

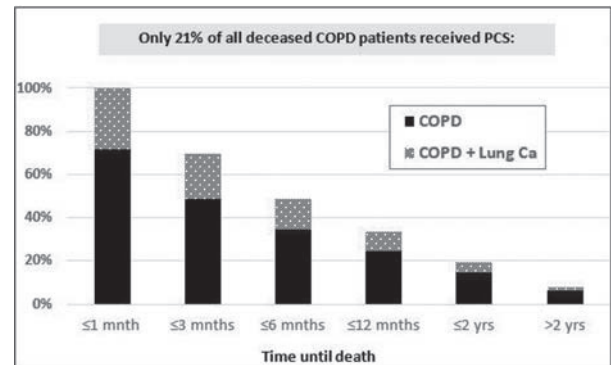
10.1136/thoraxjnl-2017-210983.132

Introduction and Objective Over 5% of UK deaths are secondary to COPD, only 1% less than from lung cancer. Yet, there remains a lack of palliative care support (PCS) for COPD patients, despite evidence that it improves their quality of life, improving both physical and physiological symptoms. NICE guidelines recommend its provision to all patients with end-stage COPD. Previous studies have found poor access for COPD patients in secondary care, this study aimed to assess PCS within primary care.

Methods Population-based open cohort study, January 2004 to June 2015, using electronic healthcare records (Clinical Practice Research Datalink). Associations with PCS were measured using logistic regression.

Results 92,365 COPD patients were included (median follow-up=4.2 years). Only 7.5% received PCS; of whom 47% had lung cancer. Only 21% of all deceased COPD patients received PCS, and within 6 months from their death only 48% of those patients had received PCS, by 3 months before their death up to 69% had received PCS (figure 1). Around a third of these patients had co-existing lung cancer (figure 1). The adjusted odds of receiving PCS was 14.6 times higher for COPD patients with lung cancer than without (95% CI 13.2–16.1), and 6.3 times higher for deceased COPD patients with lung cancer than without (95% CI 5.6–7.1), adjusted for gender, age, BMI, MI, heart failure, stroke, smoking, GOLD stage, MRC Dyspnoea grade, exacerbations, anxiety and depression. The proportion of patients that received PCS yearly increased gradually from 2004 to 2014, but remained low, only 2.1% of patients in the cohort in 2014 received PCS in 2014.

Conclusions There was limited PCS for COPD patients; this appeared to be strongly driven by a co-existing diagnosis of lung cancer, not by their advanced COPD disease. PCS was often provided only towards the end of patient's lives; this may have been related to the difficulty in prognosticating the end-of-life for individuals with COPD. Encouragingly PCS



Abstract S126 Figure 1 Graph of the 21% of deceased COPD patients that received PCS: showing how soon before their death they were provided with PCS.

increased yearly and could indicate recognition of its value and thus the requisite to discuss PCS with patients, however, this clearly remains an important unmet need.

S127 ARE GIRLS ALWAYS THINNER THAN BOYS? USING UK CYSTIC FIBROSIS (CF) REGISTRY DATA (2008–2013) TO EXAMINE WEIGHT CHANGES BETWEEN THE SEXES FROM CHILDHOOD AND BEYOND

¹SS Hippolyte, ²NJ Simmonds, ³D Bilton, ¹U Griesenbach, ⁴R Keogh. ¹Gene Therapy Group, NHLI, Imperial College, London, UK; ²Royal Brompton Hospital, London, UK; ³NHLI, Imperial College, London, UK; ⁴London School of Hygiene and Tropical Medicine, London, UK

10.1136/thoraxjnl-2017-210983.133

Introduction Worse BMI in CF is associated with worse survival. The UK-CF Registry was used to examine weight differences between sexes, and determine the age this occurs, and how this relates to feeding supplementation (FS) and outcomes, such as change in FEV₁, intravenous antibiotic use (IVABx) and mortality.

Methods Cross-sectional analysis (2013) of weight variables (expressed as BMI for subjects ≥16 years, BMI percentiles (BMIP) individuals <16 years and BMI Z-scores for 6–23 year-old subjects), FS and IVABx were compared between sexes using paired t-tests and chi-squared analyses. Age groups were

created to examine adolescence in detail (0–5,6–12,13–15,16–19,20–23,24–29 and ≥ 30 years). A longitudinal analysis (2008–2013) of weight change investigated potential explanatory variables between the sexes, such as diabetic status (CFRD) and FS.

Results Cross-sectional Boys 13–15 years had lower mean BMIP than girls (41.2 vs 50.5 $p < 0.001$). Boys had a lower Z-score than girls for age 13–23 years. Mean BMI was significantly lower in females (21.9 vs 22.5 $p < 0.001$). More females were underweight (BMI < 19) than males (18.9% vs 14.0% $p < 0.001$), this was specifically observed in ages ≥ 24 years. Underweight individuals died younger than individuals with BMI ≥ 19 (29.3 years vs 36.0 years $p = 0.007$). Lower weight was associated with more IVABx days. Males had higher rates of FS (34.7% vs 28.9% in females $p < 0.001$) specifically when ≥ 16 years. These sex differences were not explained by differences in ethnicity, genotype or socio-economic status.

Longitudinal Boys had a greater fall in BMIP (8.3 vs 4.1 in females $p = 0.002$). In adulthood, females had significantly less increase in BMI (0.20 vs 0.57 in males $p < 0.001$). FEV₁ decline was greater in females (7.4% vs 5.9% in males $p = 0.0016$) not receiving FS, with no difference in change in FEV₁ between the sexes in those receiving FS.

Conclusion From ≥ 16 years boys changed from having lower BMIP to *higher* mean BMI and lower rates of underweight status in adulthood. Higher rates of FS in adolescent boys might explain this. Lower weight is associated with earlier death and increased IVABx use. In individuals without FS females have a greater decline in FEV₁ than males, this is not seen in individuals on FS. This has not been previously shown and warrants further analysis.

Managing pleural disease: from intervention to conservation

S128 EXPLORING THE BEHAVIOUR OF MESOTHELIOMA IN A POST HOC ANALYSIS FROM THE TIME 1 TRIAL

¹RM Mercer, ²J Macready, ²H Jeffries, ³N Speck, ⁴NI Kanellakis, ⁵N Maskell, ⁶J Pepperell, ⁷T Saba, ⁸A West, ⁹N Ali, ¹⁰RF Miller, ¹JC Corcoran, ¹RJ Halifax, ¹R Asciak, ¹M Hassan, ¹I Psallidas, ¹NM Rahman. ¹Oxford Centre for Respiratory Medicine and Oxford Respiratory Trials Unit, Oxford, UK; ²University of Oxford, Oxford, UK; ³University of Zurich, Zurich, Switzerland; ⁴Laboratory of Pleural Translational Research, Nuffield Department of Medicine, University of Oxford, Oxford, UK; ⁵Academic Respiratory Unit, Department of Clinical Sciences, Southmead Hospital, University of Bristol, Bristol, UK; ⁶Somerset Lung Centre, Musgrove Park Hospital, Taunton, UK; ⁷Blackpool Teaching Hospitals NHS Foundation Trust, Blackpool, UK; ⁸Medway Maritime Hospital, Gillingham, UK; ⁹King's Mill Hospital, Mansfield, UK; ¹⁰Research Department of Infection and Population Health, Institute of Epidemiology and Healthcare, University College London, London, UK

10.1136/thoraxjnl-2017-210983.134

Introduction Malignant Pleural Mesothelioma (MPM) is the only malignancy which develops primarily in the pleural space and is a common cause of a malignant pleural effusion (MPE). MPE associated with MPM is managed similarly to any other malignancy, but it is unclear if the underlying mechanisms of fluid accumulation are the same and whether different treatment strategies should therefore be employed. The TIME 1 trial enrolled patients with MPE who underwent pleurodesis. This post hoc analysis compares the outcomes of patients with MPM to the rest of the trial population.

Abstract S128 Table 1

	Mesothelioma	Other	Significance
Pleurodesis Success	77/107 (72.0%)	142/173 (82.1%)	$\chi^2 = 3.97$, 1 df, $p = 0.046$
Trapped lung	19/91 (20.9%)	26/177 (14.7%)	$\chi^2 = 1.65$, 1 df $p = 0.199$
Mean total fluid drained (95% CI)	2208 (1917–2498)	2345 (2119–2570)	$p = 0.621$
Mean change in CRP (Day 0–1)	58 (SD 43)	32 (SD 50)	$p < 0.001$
Mean change in WCC (Day 0–1)	2.53 (SD 2.83)	1.89 (SD 3.31)	$p = 0.13$
Median enrolment pain VAS	4 (IQR 6)	5 (IQR 15)	$p = 0.016$

SD=Standard Deviation, df=degrees of freedom, CI=confidence interval, and IQR=Interquartile Range

Methods 298 patients had available data on their final diagnosis. A number of different variables were compared, including pleurodesis success, systemic inflammation, the prevalence of trapped lung, total fluid volume drained and baseline pain Visual Analogue Score (VAS).

Results Of the 298 patients included in the analysis 110 patients had mesothelioma (36.9%). Post pleurodesis, MPM patients had a significantly greater rise in CRP than those with other underlying pathologies but had a significantly lower rate of successful pleurodesis. Patients with MPM had a lower pain VAS score on enrolment. There was no significant difference in the rates of trapped lung, the total volume of pleural fluid drained or the change in White Cell Count (WCC) between the groups.

Conclusion There are significant differences in the outcomes of patients with MPM and those with other MPE. Patients with MPM had a lower pleurodesis rate but a significantly greater change in C-reactive protein levels post pleurodesis, signifying a higher inflammatory response to pleurodesis, which has been assumed to associate with pleurodesis success. The mechanisms causing the increased inflammatory response in MPM are unclear. The basis for the lower rates of pleurodesis is unexplained, especially as there was no significant difference in the rates of trapped lung. Patients with MPM had a lower level of pain VAS scores on enrolment but further analyses are needed to determine whether this is clinically relevant and reproducible. These data indicate that MPM behaves differently to other forms of MPE and treatment strategies should be tailored towards MPM as a separate entity.

S129 DOES INFLAMMATION PREDICT SUCCESSFUL PLEURODESIS? A POST HOC ANALYSIS FROM THE TIME 1 TRIAL

¹RM Mercer, ²J Macready, ²H Jeffries, ³N Speck, ⁴NI Kanellakis, ⁵N Maskell, ⁶J Pepperell, ⁷T Saba, ⁸N Ali, ⁹A West, ¹⁰RF Miller, ¹R Asciak, ¹R Halifax, ¹JC Corcoran, ¹M Hassan, ¹I Psallidas, ¹NM Rahman. ¹Oxford Centre for Respiratory Medicine and Oxford Respiratory Trials Unit, Oxford, UK; ²University of Oxford, Oxford, UK; ³University of Zurich, Zurich, Switzerland; ⁴Laboratory of Pleural Translational Research, Nuffield Department of Medicine, University of Oxford, Oxford, UK; ⁵Academic Respiratory Unit, Department of Clinical Sciences, Southmead Hospital, University of Bristol, Bristol, UK; ⁶Somerset Lung Centre, Musgrove Park Hospital, Taunton, UK; ⁷Blackpool Teaching Hospitals NHS Foundation Trust, Blackpool, UK; ⁸King's Mill Hospital, Mansfield, UK; ⁹Medway Maritime Hospital, Gillingham, UK; ¹⁰Research Department of Infection and Population Health, Institute of Epidemiology and Healthcare, University College London, London, UK

10.1136/thoraxjnl-2017-210983.135