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P261 DOES THE PROVISION OF A RESCUE PACK KEEP PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) AT HOME?

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Introduction COPD accounts for one in eight hospital admissions, 1 million bed days and costs £870–930 m a year.[1] Early treatment of exacerbations with steroids reduces severity and may reduce the need for hospital admission.[2] We evaluated the acceptance and use of a rescue pack provided on discharge from hospital.

Methods 38 patients, discharged between 1 February and 30 June 2011, were supplied a 7 day rescue pack comprising Prednisolone 25 mg and Doxycycline 100 mg (total cost of £7) with education and a self-management plan.

A telephone questionnaire was conducted in July:

1. Do you remember being given a rescue pack on discharge from hospital?
2. Have you had a flare-up of your COPD since discharge?
3. Did you use your rescue pack?
4. Did you take both antibiotic and steroid?
5. Did you complete the course?
6. Do you think it helped keep you at home?
7. Have you got a replacement rescue pack?

Results 25 out of 38 (66%) patients were contactable. 11 (44%) were male and 14 (56%) female. The median age was 77 (range 53–89) years. The median time from discharge to telephone contact was 110 (range 21–168) days. 24 (96%) patients acknowledged receipt of the rescue pack. 14 out of 15 (93%) patients who had experienced an exacerbation of COPD had used the rescue pack. Of these 14 patients, 13 (93%) were confident of the benefit and 10 (71%) had obtained a replacement pack. Six of the 38 (16%) patients supplied with a rescue pack were re-admitted with an exacerbation.

Conclusions The results of this service evaluation suggest a cost-effective initiative that may reduce hospital re-admission by promoting earlier treatment. Rescue packs should be supported by education and a self-management plan.

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P262 ORAMORPH FOR BREATHLESSNESS: IN PURSUIT OF GUIDELINES AND PATIENT INFORMATION FOR USE IN COPD

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Introduction Breathlessness is the most common and frightening symptom in Chronic Obstructive Pulmonary Disease (COPD). Short-acting morphine (Oramorph) has traditionally been used to treat breathlessness in palliative care. Although used in COPD (Simon *et al*, 2010), there is no consensus/guidelines for prescribing and patients stigmatise morphine, associating it with dying or addiction. In this study, we assessed current prescribing practice, patient use and safety of Oramorph, to inform local prescribing guidelines and patient information.

Method Case notes of patients who were prescribed Oramorph for breathlessness while having multidisciplinary COPD care between 2004 and 2011 were reviewed. The following were documented: patient demographics, disease severity (FEV_1, MRC dyspnoea score, nebulisers, long term oxygen therapy (LTOT), domiciliary Non-Invasive Ventilation (NIV), social/healthcare support and palliative care referrals; Oramorph starting dosage, dosage range, increase in dosage, patient choice to continue, duration of and use of morphine sulphate slow release tablet (MST).

Results 28 COPD patients prescribed Oramorph for breathlessness were identified (14 M), median (range) age 70 (52–83) years FEV_1 (mean±SD) 0.58±0.22, MRC dyspnoea score 4.6±0.49. 19/28 (68%) were on LTOT, 28/28 (100%) on nebulisers, 5/28 (17%) on domiciliary NIV, two current smokers, 10/28 (36%) lived alone, 27/28 (96%) had professional healthcare domiciliary visits, 8/28 (29%) had palliative care input. Starting, incremental and current dosing of Oramorph are shown in the Abstract P262 table 1. 25/28 (89%) patients chose to stay on Oramorph once started. Median (range) duration on Oramorph was 8 months (45 days–7.5 years). MST was added for breathlessness in three patients. 13/28 (46%) patients died; all were MRC 5 and starting Oramorph was not felt to be a contributing factor by the clinical team. Time to death after starting Oramorph was median (range) 7 months (68 days–2.6 years). Oramorph prescribing in COPD increased year-on-year (one patient in 2004 to 12 in 2010).

Conclusion Oramorph prescribed by a respiratory team for breathlessness is safe in this group of patients. This study indicates that its effect is sustained despite low dosages with little requirement for incremental dosing over time. Guidelines for prescribing and patient information will be critical to ensure that patients are not denied this useful treatment of breathlessness.

Abstract P262 Table 1

Oramorph	Median dose mg	Range dose mg
Starting dose (n=28)	2.5 mg bd	1.25 mg bd–5 mg qds
Increase (n=12)	2.5 mg bd	2.5 mg bd–10 mg qds
Current dose	2.5 mg bd–2.5 mg qds	1.25 mg bd–10 mg qds

P263 CANNABIS USE, RESPIRATORY SYMPTOMS AND LUNG FUNCTION, IN A NORTH EDINBURGH PRIMARY CARE POPULATION

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Background We are conducting a cross-sectional study of cannabis and tobacco smokers in a primary care population and reporting respiratory symptoms and lung function in two groups: Group 1=persons who smoke tobacco cigarettes (branded cigarettes +/– "roll-your-own"); Group 2=persons who smoke cannabis +/– tobacco cigarettes.

Methods Information on tobacco and cannabis smoking is obtained from the Avon Longitudinal Study of Parents and Children. Cumulative smoking is quantified by use of tobacco pack-years (py) and joint years (jy). Additional tobacco use in cannabis smokers is recorded. Other instruments used include the NHANES III and MRC breathlessness questionnaires, measurement of ventilatory capacity (Vitalograph α) and the Scottish Indices of Multiple Deprivation

score. The study is powered to detect a 13% difference in prevalence of respiratory symptoms between groups and statistical analysis will be undertaken when the study closes (September 2011).

Results To date, we have recruited 409 subjects. Group 1: n=199 (66 men, median age=47.5 (range 24–73)); (133 women, median age 42.0 (range 17–66)). Group 2: n=210 (126 men, median age 38.5 (range 20–63) and 84 women, median 35.0 (range 22–58)). The majority (>90%) of cannabis smokers employ unfiltered single skinned joints: 78% smoke resin and 22% grass. The median (range) cumulative py tobacco for group I males=31 (5–116); females=23 (5–70); group 2 males=25 (2.5–113); females=20 (1–88). Group 2 median (range) jy: males=110 (1–1050); females=54 (1–280). Compared with Group I, Group 2 smokers more frequently report cough, sputum production, wheezing and breathlessness and are more likely to report more than 3 NHANES symptoms. To date, 352 lung function tests meet GOLD criteria for acceptability: Group 1=166 and group 2=186. The prevalence of airflow limitation in Group 1 is 24.1% and in Group 2 is 24.2%.

Conclusions Despite being younger and smoking less tobacco, cannabis smokers report a greater number of respiratory symptoms than tobacco-only smokers and show an equal prevalence of airflow limitation.

P264 THE PREVALENCE OF β-BLOCKER PRESCRIPTION IN COPD PATIENTS

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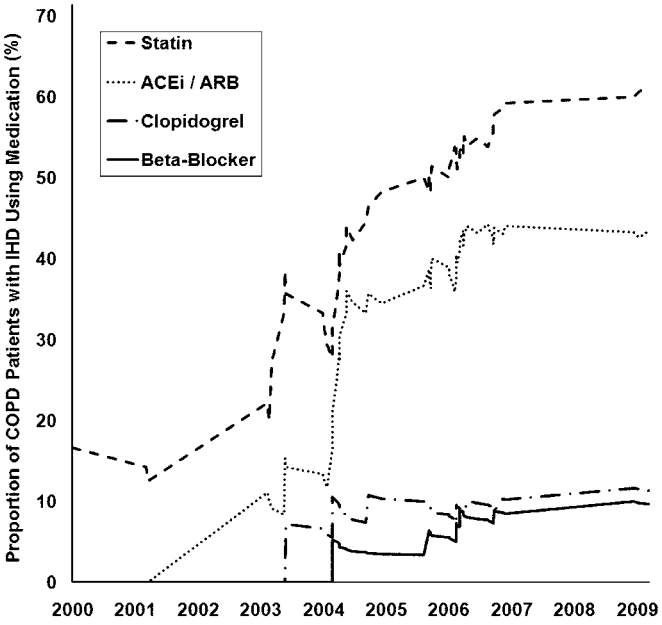
Introduction Ischaemic heart disease (IHD) is a major cause of morbidity and mortality in COPD patients. Effective cardiovascular therapies may have significant impact in COPD populations. In particular, β-blockers have been shown to be safe and effective in COPD. We aimed to quantify the changing prevalence of emerging cardiovascular medications in this group over the last decade.

Methods We analysed the recruitment records of well-characterised patients enrolled into the London COPD Cohort from 1995 to 2010. Date of enrolment, comorbidities, medications, demographics, smoking history and spirometry results were analysed. Prescribing data reflects that of the patients' primary physicians.

Results The mean±SD age of 386 COPD patients was 68.4±8.7 years, FEV_1 was 1.22±0.55 l or 49.5±19.6% predicted. 57% were male, 24% were current smokers with a median (IQR) pack year history of 45 (25–65). 64 (17%) patients had IHD of whom half had a previous myocardial infarction, 4% had heart failure, 6% had a previous stroke, 5% had peripheral vascular disease (PVD), 9% had a tachyarrhythmia. The overall prevalence of at least one cardiovascular disease was 30%. 36% had hypertension, 8% had hypercholesterolaemia and 7% had diabetes. Common cardiovascular medications included statins (28%), aspirin (23%), calcium-channel blockers (21%), ACE-inhibitors (18%), loop diuretics (15%), thiazides (14%) and angiotensin receptor blockers (7%). β-blockers were indicated in 25% of patients (IHD ± heart failure ± tachyarrhythmia; 22% when those with the contraindication of PVD are excluded). The prevalence of β-blockers was only 5% overall and prescribed to only 8/84 (10%) in those with a clinical indication and no PVD (χ^2 test, p=0.020). In the 64 patients with IHD, statins and angiotensin pathway drugs became more prevalent in the last decade of the study period (Abstract P264 figure 1) in keeping with emerging evidence of benefit. β-blockers did rise in prevalence as evidence of safety emerged, although to a much smaller extent than statins and angiotensin pathway drugs.



Abstract P264 Figure 1 The cumulative proportion of emerging cardiovascular medications in newly recruited COPD patients with ischaemic heart disease.

Conclusions Emerging cardiovascular medications have become more common in COPD patients reflecting greater recognition of cardiovascular risk. However, β-blockers were underused despite clear indications and evidence of safety and benefit in COPD. Measures are required to improve evidence-based prescribing to overcome historical beliefs.

P265 A RANDOMISED CONTROL TRIAL TO INVESTIGATE THE EFFECTIVENESS OF PLB IN THE CLINICAL SETTING

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Introduction Pursed lips breathing (PLB) at rest increases oxygen saturation and tidal volume and reduces respiratory rate. Used with exercise it shortens the recovery period, reduces end-exercise breathlessness and improves reported physical function measured by SF-36 (Roberts SE *et al*, 2009). This study aimed to explore, in a clinical setting, the effectiveness of PLB, in the management of dyspnoea in stable COPD.

Methods COPD patients referred to pulmonary rehabilitation (PR) were randomised to a control or PLB intervention group. Patients were visited twice at home over 8 weeks prior to starting PR. Each visit comprised a respiratory examination and provision of information on the PR programme; the intervention group were also taught PLB, instructed to practise this daily and to use the technique whenever troubled by breathlessness. Use of PLB was recorded in a home diary. Primary outcome measures were the Self Report Chronic Respiratory Disease Questionnaire (CRQ-SR) dyspnoea and mastery domains and the Endurance Shuttle Walk Test (ESWT). An a priori power calculation, for 80% power, was based on local PR data. Secondary outcome measures were change in Borg breathlessness, respiratory rate, heart rate and oxygen saturation on ESWT.