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 $\beta\text{-}BLOCKER$ prescription in copd patients

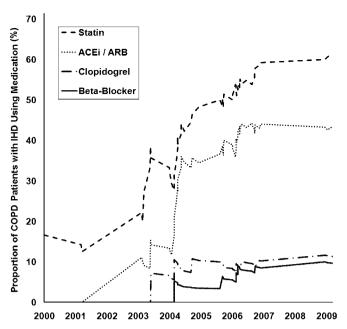
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Introduction Ischaemic heart disease (IHD) is a major cause of morbidity and mortality in COPD patients. Effective cardiovascular therapies may have significant impact in COPD populations. In particular, β -blockers have been shown to be safe and effective 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, FEV₁ was 1.22 ± 0.551 or $49.5\pm19.6\%$ 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%), calciumchannel 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.

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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.