AB041: A randomised controlled trial comparing telephone review with face to face consultations in the management of adult asthmatics in UK primary care

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Introduction: Current UK Asthma Guidelines emphasise the importance of regular review. However, only a third of adult asthmatics attend for an annual review despite significant morbidity. This study tests the hypothesis that a telephone review is an effective and safe alternative to face-to-face consultations.

Methods: Symptomatic (definition: one or more bronchodilator prescription in past 6 months) asthma patients not reviewed in the previous 12 months were recruited from four UK general practices and centrally randomised to telephone review or face-to-face consultation with the asthma nurse. Our primary outcome measure was the proportion of asthmatics reviewed. Other outcomes of interest were: length of consultation, asthma quality of life (measured using validated Juniper Mini Asthma Quality of Life Questionnaire (miniAQLQ)) and patient satisfaction (measured using validated Nursing Care Satisfaction Questionnaire (NCS)).

Results: 278 asthmatics were randomised to surgery (S: n=141) or telephone (T: n=137) assessment. Baseline demographic characteristics were similar in both groups. 101 (74%) of asthmatics in the telephone group were reviewed compared to 68 (48%) in the surgery group (p<0.001). Telephone consultations were significantly shorter (mean duration S: 21.87 (SD 6.85) vs.T: 11.19 (SD 4.79) minutes (p<0.001). Quality of life measured three-months after the assessment was equivalent in the two groups: miniAQLQ S: 5.22 (SD 1.14) vs. T: 5.15 (SD 1.28) p=0.69. Both groups were equally satisfied with the consultation NCS: S: 3.86 (SD 0.55) vs. T: 3.80 (SD 0.57), p=0.5.

Conclusion: Telephone consultations enabled 26% (95% CI 14 to 37%, p<0.001; NNT=3.8) more asthmatics to be reviewed than surgery consultations without any apparent clinical disadvantage or loss of satisfaction. The shorter duration of telephone consultations suggests that this may be an efficient option for the routine review of asthmatics.

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Keywords: Asthma, organisation of care, telephone consultation

AB042: Measurement of FEV_1 and FVC with a hand held spirometer by GPs: feasibility and validity.

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The value of PEFR measurements in diagnosing reversible obstructive airway disease is debatable, therefore spirometry should be available on-site in the primary care practice. Measurements of FEV_1 and FVC (basic spirometry) are justified when the physician observes changes in the patient's pulmonary status.

We assessed the validity of measurements of FEV_1 and FVC in 57 adult patients with limited airflow (FEV_1 range 0,84L-3,90 L) by experienced GPs with the use of a hand held spirometer without a flow-volume loop visible on the display.

The coefficient of variation of repeated measurements by the GP's was 2,1% for FEV_1 and 2,0% for FVC. The mean of the difference between FEV_1 measured by the GP's and FEV_1 measured by the lung function assistant with a pneumotachometer was 0,070 L. In all more severely obstructed patients (FEV_1 < 70% pred., N=33) difference between the values of FEV_1 and FVC by GP's and the golden standard was 0,100 L and 0,200 L at maximum respectively. The GP's measurement of the FEV_1 can be used interchangeably with the results of the lung function laboratory. Our further results indicate that validity of the FVC measured by the experienced GPs is negatively influenced by instrument- and not primarily by physician-elated factors.

AB043: Characteristics of adults with persistent cough in general practice

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Persistent cough may be associated with bronchial hyperresponsiveness and/or smoking. We analysed the baseline data of the participants of a general practice, single-centre, randomised, double-blind, placebo controlled parallel group study to determine the effect of a 2 week treatment with fluticasone propionate 2x 250 µg bd MDI via Volumatic spacer in patients with persistent cough (two weeks and over) and/or acute bronchitis (without asthma or COPD).

Participants: N=135, age range: 18-65y, women: 64%, bronchial hyperresponsive (PD20): 38%, allergy (RAST): 22%, smokers: 37% and FEV_1% pred: mean 101%.

Results: Mean FEV_1 % pred in patients with normal PD20 was 107% and in patients with mild/moderate PD20 was 92% (p<0.001). Difference in PD20 between allergy y/n was small: median 1.80 mg (allergy) vs more than 2.00 mg histamine (no allergy) (p=0.011). There was no relationship between problems with environmental factors (AQLQ, Juniper) and PD20 measured in our patients, neither in smokers nor in non-smokers. Smokers of all ages had mean FEV_1% pred lower than non-smokers (96% vs 105% pred, p=0.003). Baseline cough score (last 24 h) was weakly related (r=-0.21, p=0.02) to limitations by cough during the last 2 weeks. However, stronger relationships (r=-0.43 and r=-0,44, p<0.001) were found between baseline night-cough score (last 24 h) and awakenings by cough last night vs. interference (during the last 2 weeks) with getting a good night's sleep because of cough.

Conclusion: Symptoms due to environmental factors do not predict hyperresponsiveness (PD20). FEV_1 %pred and problems with cough during the last night showed the strongest correlation with limitations due to persistent cough in primary care.