

**ABS23: Diagnostic value of FEV1 measurements in the GP's office**

Tjard Schermer<sup>a</sup>, Ben Ponsioen<sup>b</sup>, Riet Cretier<sup>c</sup>, Renée van Snippenburg<sup>d</sup>

<sup>a</sup> Department of General Practice, Radboud University Nijmegen Medical Centre, P.O. Box 9101 (117-HAG), Nijmegen, 6500 HB, The Netherlands <sup>b</sup> General Practice, Erasmus Medical Centre Rotterdam, The Netherlands <sup>c</sup> General Practice, Radboud University Nijmegen MC, The Netherlands <sup>d</sup> Pulmonology, Diaconessenhuis, Utrecht/Zeist, The Netherlands

**Aims and objectives:** To determine whether office spirometry (pre- and post-BD FEV1 measurement by the GP with handheld spirometer) contributes to diagnosing obstructive airways disease in subjects with unexplained airway symptoms. **Subjects and methods:** 15 GPs were instructed regarding FEV1 measurements and interpretation of spirometry and received a handheld spirometer. GPs performed office spirometry during or immediately after consultation in adults who presented with unexplained airway symptoms and recorded their diagnoses before and after office spirometry. Patients previously diagnosed with asthma or COPD were excluded. Within one week subjects underwent full spirometric testing in a lung function laboratory. Based on the laboratory test a pulmonologist labelled subjects as 'obstructive' or 'not obstructive'. Sensitivity (Se), specificity (Sp), and Diagnostic Odds Ratio (DOR) were calculated for the GPs' diagnosis of obstructive airways disease before and after office spirometry. The pulmonologists judgements served as 'Gold standard'. **Results:** 75 subjects were included (29 males). Mean age was 54 (SD 16) years. Initial GP diagnoses were: COPD/bronchitis (39%), asthma (36%), COPD/asthma (9%), and URTI (5%). Mean office spirometry post-BD FEV1 % predicted was 10.5% (SD 11.2) lower than for the laboratory test ( $p < 0.001$ ). Before office spirometry the GPs' diagnosis of COPD had a Se = 56%, Sp = 53% and DOR = 1.47 (95%CI 1.35; 1.67). After office spirometry these values were Se = 56% and Sp = 76% and DOR = 4.12 (95%CI 2.98; 7.47), respectively. **Conclusions:** Although office spirometry FEV1 values were significantly lower compared to laboratory values, the higher specificity and Diagnostic Odds Ratio indicate better diagnostic test characteristics of the GPs' judgment when office spirometry is added in adults who present with unexplained airway symptoms.

**Conflict of interest and funding**

None. Funding: GlaxoSmithKline.

doi:10.1016/j.pcrj.2006.04.125

**ABS24: Does physicians' greater sensitivity towards asthma influence its morbidity?**

X. Castán, X. Flor, J.M. Vigatà, I. Álvarez, M. Rodríguez, L. Gallego

ABS EAP Chafarinas, C/Chafarinas, 2, Barcelona, 08033, Spain

**Introduction:** Asthma is a chronic inflammatory pulmonary illness which is underdiagnosed and undertreated, with a prevalence of over 5%. It is associated with increased physical comorbidity, mortality, high rates of health service utilization, and occupational disability [1]. Correct diagnosis, treatment and control are important to improve quality of life and minimize social and economic costs. **Aims and objectives:** To evaluate whether a physician's greater sensitivity towards asthma reduces 4 morbidity items (MI) of his/her asthmatic patients. **Subjects and method:** A transversal descriptive study developed in Barcelona Primary Care Centre (PCC), performed on asthmatic people over 14 years. 284 patients were classified in 2 groups according to greater (A) or lesser (B) sensitivity of their physicians towards asthma (integration of professionals into asthma study groups). A and B were firstly compared taking into account 14 quality variables (QV). Then, they were compared

evaluating 4 MI: visits due to asthma crisis to the PCC (VPCC), to the hospital (VH), total crisis (CY) and leave days (LD) per year. **Results:** A and B were comparable in age, sex, and severity. Among the 284 patients, 108 were classified according to GINA 2002 criteria. There were significant differences favouring A in 13 QV: diagnosis by general practitioner (GP) ( $p = 0.02$ ), control by GP ( $p = 0.001$ ), asthma classification ( $p < 0.001$ ), spirometry per year ( $p < 0.05$ ), register of: immunotherapy ( $p < 0.05$ ), illness concept ( $p < 0.001$ ), inhaler technique (IT) ( $p < 0.001$ ), number of IT ( $p < 0.001$ ), home MEF register ( $p < 0.001$ ), self-control ( $p < 0.001$ ), attitude towards crisis ( $p < 0.001$ ), attitude towards allergens avoidance ( $p < 0.03$ ), smoking cessation advice ( $p < 0.03$ ). Relating to the morbidity items, there was a tendency towards significance in the number of visits to hospital favouring group A: VPCC ( $p = 0.9$ ), VH ( $p = 0.05$ ), CY ( $p = 0.59$ ), LD ( $p = 0.9$ ). **Conclusions:** There were not significant differences between both groups. There is a tendency towards significance favouring A relating to the number of visits to hospital due to crisis. It would be necessary to increase monitoring on these patients.

**Conflict of interest and funding**

None declared.

**Reference**

- [1] Sanz A. Factores moduladores del coste del asma (I). *Offarm* 2003;22(10):162-4;  
Global Initiative for Asthma 2002.

doi:10.1016/j.pcrj.2006.04.126

**ABS26: Under-diagnosing allergies and asthma – the need for training primary care physicians**

Mohammad Osman Yuluf<sup>a</sup>, Shabida Osman Yusuf<sup>a</sup>, Mohsin Saeed Khan<sup>a</sup>, Samina Mohsin Khan<sup>a</sup>, Naseeruddin Mahmood<sup>b</sup>

<sup>a</sup>The Allergy & Asthma Clinics, 275 Gomal Road, Sector E-7, Islamabad 44000, Pakistan <sup>b</sup>National Coordinator, ISAAC, Pakistan

**Introduction:** Allergic diseases are highly prevalent in Pakistan. The ISAAC Study (International Study on Asthma and Allergy in Childhood) conducted in Islamabad in 2002, has reflected this high prevalence in children. However, the high rate of under-diagnosis and possible misdiagnosis underlines the need for creating more awareness about these conditions in health care professionals of all levels. **Methods:** 4,021 school children belonging to the age groups of 6–7 and 4,078 belonging to the age group of 13–14 years, were randomly selected and ISAAC questionnaires imparted to the parents of younger children (6–7 years) while filled by the children themselves in the elder (13–14 years) age group. **Results:** Symptoms suggestive of asthma were present in 314 (7.8%) of younger children, but only 136 (3.4%) were diagnosed as asthmatics. Similarly 657 (16.2%) of elder children had asthma symptoms, but only 238 (5.8%) were diagnosed. 1073 (26.7%) of younger children and 2551 (62.7%) of elder children had a history of nasal problems in their lifetime, but more, i.e. 75.1% of younger and 73.3% of elder children were diagnosed to suffer from seasonal allergies. Similarly 381 (9.5%) of younger and 750 (18.5%) of elder children have suffered from symptoms suggestive of eczema, but only 3.1% of younger and 6% of elder children were actually diagnosed to suffer from eczema, by any medical practitioner. **Discussion:** These results show clearly that asthma and eczema have been grossly under-diagnosed or missed, while rhinitis has correspondingly been over-diagnosed. These findings highlight the importance of comprehensive awareness and proper diagnosis in order to institute effective preventative and treatment strategies.

**Conflict of interest and funding**

None declared.

doi:10.1016/j.pcrj.2006.04.127