

(ABI009: Chronic Obstructive Pulmonary Disease: An audit in primary care *Prim Care Respir* 2002 **11(2)** 57

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Introduction: Chronic Obstructive Pulmonary Disease (COPD) is a common cause of consultations in Primary Care and accounts for as many as 1 in 8 medical admissions.

Objectives: The main aims of this audit are accurate diagnosis of COPD, control of symptoms and thereby promoting quality of care, to evaluate current medications and to encourage patients to stop smoking.

Methods: Initial search of the practice population revealed 82 patients who were potentially suffering from COPD (Age 43-86 years). With support of Respiratory Specialist nurse, all these patients had spirometry and reversibility tests for confirmation of their diagnosis. 4 patients were confirmed of suffering from COPD. All these patients were given St George's Respiratory Questionnaire (SGRQ) to assess the symptoms, their current medications were assessed and smoking cessation advice was given. These patients were subsequently followed up in further two audit cycles with carbon monoxide monitoring in last audit.

Results: In January 1999, only 48% (N=23) of COPD patients were using B2 agonists on regular basis, this increased to 97% (N=36) in March 2000 and 92% (N=34) in January 2001. Usage of anticholinergic increased from 20% (N=10) to 51% (N=19) in same period. Percentage of patients on inhaled corticosteroids came down from 70% (N=34) to 53% (N=21) for the above period. Those who were on high doses of inhaled corticosteroids (.800mcg daily) also reduced from 44% (N=15) to only 8% (N=3). 50% (N=26) of COPD patients were smoking in January 1999 and this reduced to 24% (N=9) in January 2001. The carbon monoxide monitoring in these patients revealed that 67% (N=20) of these patients showed carbon monoxide traces between 0-3%. Quality of Life Questionnaire (SGRQ) of these patients revealed that percentage of patients feeling better was increased from 35% (N=17) to 57% (N=21) for the above period.

Conclusion: Smoking cessation is the cornerstone of COPD management. Accurate diagnosis and frequent assessment of medication improves the outcome. The use of inhaled corticosteroids should be reserved for more severe COPD patients

(ABI010: Environmental and lifestyle risk factors for developing specific IgE to inhalants in young childrenAuthor(s): PED Eysink, PJE Bindels, G ter Riet, SO Stapel, RC Aalberse, Dept. Of General Practice, Universiteit van Amsterdam AMC (*Prim Care Respir* 2002 **11(2)** 57

Aim: To longitudinally describe the relation between indoor and lifestyle factors and the subsequent development of specific IgE to inhalant-allergens

Methods: Coughing children, aged 1-5, were tested for IgE-antibodies to mite, dog and cat by RAST. All children with all RASTs <0.1 IU/ml were retested after 30 months. The results of the second RAST were dichotomized in IgE-positive (RAST ≥ 0.5 IU/ml) or IgE-negative. The parents completed questionnaires during the first and second RAST. The results of the second RAST were compared to items on smoking by the parents, pets at home, breastfeeding, siblings, floor covering, moulds and dampness. Adjusted odds ratios (ORs) for becoming IgE-positive in relation to lifestyle and environmental factors were calculated

Results: After 2 years, 33 of 317 originally IgE-negative children had become IgE-positive (22/169 boys, 11/148 girls). Associated with decreased risk of allergy was having (had) pets at home (OR= 0.38; 95% CI= 0.18-0.80). Associated with an increased risk of allergy was non-Dutch nationality (OR= 4.76; 95% CI= 2.04-11.12). The associations between the development of allergy and smoking during pregnancy, during the first year of life or smoking of the father as well as having pets during the first year of life, breastfeeding, smooth vs non-smooth floor covering in living or bedroom, exposure to moulds or damp ranged between 0.75 and 1.75 and were not statistically significant at p= 0.05

Discussion: Our data indicate that children who have (had) pets at home are less likely to develop specific IgE to inhalants than children who never had pets. Having a non-Dutch nationality is a risk factor for becoming IgE-positive

Keywords: asthma, allergy, children, risk factor

(ABI011 Predictive value of specific IgE for the development of asthma in children younger than 5 years presenting with persistent coughing in general practice *Prim Care Respir* 2002 **11(2)** 57

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Background: To diagnose asthma in children <5 years, the general practitioner has to rely upon medical history, physical examination and family history of atopy. Peakflow or lungfunction measurements are not yet possible at such a young age. The presence of allergy can be demonstrated by measuring total IgE or specific IgE. However, the predictive value of specific IgE measured in young children for the development of asthma at a later age is unknown.

Aim: What is the predictive value of elevated specific IgE in under-fives for a diagnosis of asthma at the age of six?

Methods: Coughing children, aged 1-5, were tested for IgE-antibodies to mite, dog and cat by RAST. The IgE-positive and a sample of the IgE-negative children were followed-up at the age of 6 for asthma and asthmatic symptoms. A medical records' review and a lungfunction test were performed. Asthma was defined as asthmatic symptoms and moderate or severe bronchial hyperresponsiveness

Preliminary results: At the age of 6, 101 children were followed up (35 IgE-positive). Because of their symptoms, 70 children (33 IgE positive) underwent a lungfunction test, the remaining 31 children did not have symptoms. According to this test, 42 children were not or mildly hyperresponsive (11 IgE-positive), 28 were moderately-severely bronchial hyperresponsive (22 IgE-positive). IgE-positive children were almost 7 times more likely to have developed asthma than the children being IgE-negative at the start of the study. The positive predictive value of IgE-positivity for asthma development was 62.9%, sensitivity and specificity were 78.6% and 82.2% respectively

Discussion: Our data indicate that sensitization is a strong indicator for becoming asthmatic in young children visiting the GP with symptoms of persistent coughing. This implies that in general practice it is possible to detect children at high risk to develop allergic asthma early in life by testing for specific IgE to inhalant allergens

Keywords: asthma, allergy, children, predictive value