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Not to be reproduced without the permission of the *Primary Care Respiratory Journal***Reversibility of lung function in pre-school children with asthma or asthma-like symptoms**

AB11PR

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Background. Diagnosing asthma in pre-school children with asthma-like symptoms is a major problem. From a clinical viewpoint, because of the specificity and variability of symptoms, it is currently almost impossible to distinguish the asthmatic from the non-asthmatic child. Since asthma is defined as a reversible airway obstruction reversibility testing could be of additional value.

Aim. To assess reversibility of lung function in pre-school children with asthma or asthma-like symptoms. Methods. In symptomatic children, included in the ASTERISK (Astma, Symptomen, Therapie En RISiKo factoren) study, airway resistance (pre/post salbutamol) was measured by means of interrupter technique (Rint) and forced oscillation technique (FOT) when possible.

Results. 96 Children were included in the ASTERISK study (69% male; mean age 2.6 (1.2) yr.). Lung function measurements were successful in 53 (55%) and 35 (36%) children (respectively Rint and FOT). The success rate increases with age (table 1). Lung function significantly improved after salbutamol (table 2).

Table 1. Success rates (%): 5 acceptable measurements.

Age	Rint	FOT
1-2 yr (n= 38)	16 %	0 %
2-3 yr (n= 21)	71 %	38 %
3-4 yr (n= 19)	74 %	53 %
4-5 yr (n= 18)	100 %	94 %

Table 2. Lung function pre/post salbutamol (mean (S.D.));

Lung function	Pre	Post
Rint (n=53) Resistance (kPa.s/L)	1.2 (0.6)	0.9 (0.4)*
FOT (n=35) Resistance (hPa.s/L)	7.8 (1.7)	6.7 (1.6) *
Resistance at 6Hz (hPa.s/L)	9.7 (2.7)	7.7 (2.0) *

* p<0.05 after Wilcoxon U test.

Conclusion. Reversibility testing in pre-school children with asthma or asthma-like symptoms is possible using Rint and FOT. However, the diagnostic value of this measurement needs to be determined further.

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A focus group study on the impact of the different components of pulmonary rehabilitation

AB12PO

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Background: Multi-professional pulmonary rehabilitation (PR) has been shown to improve exercise tolerance and quality of life. It is not known which aspects of PR (e.g. exercise versus education versus social support) are found to be most helpful by patients and existing quality of life tools do not explore this issue.

Methods: Six focus groups were held three months after PR with patients recruited from two programmes. One being a typical intensive, hospital-based scheme (Torquay) and the other, a short, once weekly programme based in various locations in the community (Plymouth).

Results: Perceived effects of education included reduced fear of dyspnoea, improved use of benefit system and improved drug compliance. Perceived effects of social context included encouragement during exercise and smoking cessation, and new social activities amongst group members. Exercise in a safe environment increased confidence in activity and also reduced fear of dyspnoea, leading to new activities (e.g. holidays, shopping trips, etc). Patients judged PR to be more helpful than medical interventions. There appeared to be more extra-curricula social contact in the community group.

Conclusions: Patient reported benefits of PR can be attributed to exercise, education and social context, supporting the use of multi-professional, multi-component PR programmes. Peer group support in both programmes appear to be an important factor in behavioral change.

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An Assessment of a mobile COPD specialist nurse service in primary care

AB13PR

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Background: COPD is a growing burden on the NHS which is preventable if diagnosed early and combined with smoking cessation. Diagnosis requires spirometry. A recent survey demonstrated major problems with existing spirometry in primary care. Many practices have no spirometer or have problems with interpreting the results. This study assessed the value of a trained Respiratory Specialist Nurse (RSN) offering structured COPD diagnostic and management services to practices in Plymouth PCT.

Methods: A package of services was offered to a random sample of practices in Plymouth by the RSN. All these practices owned a spirometer. The package included:

- Education for practice staff on spirometry technique, interpretation of data and COPD management.
- Spirometry clinics performed by the RSN on patients referred with dyspnoea, either at the surgery or a nearby community clinic. Assessments included bronchodilator and steroid reversibility testing. Clinics were performed with or without the practice nurse being present.
- Spirometry results were analysed by the RSN and a GP with special interest in respiratory disease. Diagnosis and suggestions for ongoing