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**P1593**  
**BE CAREFUL WITH DISCONTINUATION OF TREATMENT WITH INHALED CORTICOSTEROIDS IN MILD ASTHMA**  
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The aim of this observational study was to investigate if long-term therapy with inhaled corticosteroids could be discontinued in mild asthma when patients were in a clinically stable phase of the disease. Data were derived from a two-year randomised controlled bronchodilator intervention study in family practice. The experimental group consisted of 19 asthmatic patients, who had used inhaled corticosteroids daily during at least the year preceding this study. The responsible physician considered the subjects to be able to discontinue their inhaled steroids. The control group consisted of the 70 patients with asthma, who had not used corticosteroids in the year preceding the study. After an eight week wash-out period of steroids, the patient characteristics of the two groups were completely comparable. Outcome measures were: drop-outs because of dependency of corticosteroids, the annual decline in forced expiratory volume in one second (FEV<sub>1</sub>), annual change in nonspecific bronchial responsiveness (PC<sub>20</sub>-histamine), exacerbations, and symptoms. In the experimental group, 12 of the 19 patients (63%) dropped out during the study because of dependency of corticosteroids. In the control group, only 8 patients dropped out for this reason (11%). This difference was significant (Chi-square = 20.1, p<0.0001). In the patients of the experimental group (who continued not using inhaled steroids during at least 12 months) the annual FEV<sub>1</sub> decline was much larger than in the control subjects (165 versus 40 ml/yr, p=0.022). From these secondary analyses it was concluded that stopping maintenance treatment with inhaled corticosteroids is not advisable in all patients with mild asthma.

**P1594**  
**IS IT CORRECT TO MEASURE REVERSIBILITY TO  $\beta_2$ -AGONIST SHORTLY AFTER QUANTIFYING AIRWAY RESPONSIVENESS?**  
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**Aim:** To evaluate the validity of measuring reversibility to  $\beta_2$ -agonist ( $\beta_2$ T) 30 minutes after quantifying airway responsiveness (BR).

**Patients:** 12 patients aged 18-70 years with certain asthma, defined as 1) a history of asthma with daily use of steroids and  $\beta_2$ -agonist, 2) reversibility of more than 15% in forced expiratory volume over 1 second (FEV<sub>1</sub>) 15 minutes after inhalation of  $\beta_2$ -agonist (2,5 mg terbutaline) and 3) a fall of more than 20% in FEV<sub>1</sub> after inhalation of less than 8  $\mu$ mol histamine.

**Methods:** Patients were examined three times at the outpatient clinic, i.e., twice with  $\beta_2$ T alone, and once with BR+ $\beta_2$ T. All patients were randomized to one of the following sequences: 1) BR+ $\beta_2$ T,  $\beta_2$ T,  $\beta_2$ T, 2)  $\beta_2$ T, BR+ $\beta_2$ T,  $\beta_2$ T or 3)  $\beta_2$ T,  $\beta_2$ T, BR+ $\beta_2$ T. BR was performed in accordance with the method described by YAN using histamine to a maximum of 7,8  $\mu$ mol administered by DeVilbiss No. 40 hand-held jet nebulizers. During  $\beta_2$ T, 2,5 mg terbutaline was given. Following BR,  $\beta_2$ T was performed 30 minutes after the last inhalation of histamine when the lung function was at least 75% of baseline FEV<sub>1</sub>.

**Results:** All patients demonstrated a significant reversibility to  $\beta_2$ -agonist of more than 15%, both after histamine provocation, and when done alone. There was no significant difference in the reversibility test performed after the BR as compared to the reversibility measured alone.

**Conclusion:** The effect of  $\beta_2$ -agonist can be evaluated 30 minutes after measuring airway responsiveness without getting any false over- or underestimated reversibility.

## Notes