Although ICs have been shown to improve lung function and reduce symptoms, the effect on ED visits and hospitalizations has been more difficult to ascertain because of the relative rarity of these outcomes as compared with symptom-based outcomes. The authors circumvented this issue by selecting a cohort of patients who had visited an ED for asthma thereby enriching the study population for those with more severe disease. This study underscores the significant role ICs play in preventing ED visits for asthma and suggests that the next step is to define the optimal dose range so that the risk:benefit ratio can be minimized.

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Efficacy and Safety of Low-Dose Fluticasone Propionate Compared with Zafirlukast in Patients with Persistent Asthma


Purpose of the Study. The study was designed to compare the efficacy and safety of fluticasone propionate and zafirlukast in patients with relatively stable persistent asthma who were previously treated with inhaled corticosteroids and short-acting β2-agonists.

Patient Population and Methods. A total of 440 patients (≥12 years of age) previously treated with inhaled corticosteroids (beclomethasone dipropionate or triamcinolone acetonide) and short-acting β2-agonists were included in this randomized, double-blind study. After an 8-day run-in period, patients were treated with fluticasone (88 μg) or zafirlukast (20 mg) twice daily for 6 weeks. Outcome measures included pulmonary function (forced expiratory volume in 1 second [FEV1]), peak expiratory flow [PEF]), albuterol use, asthma symptoms, withdrawals attributable to lack of efficacy, and asthma exacerbations.

Results. Patients treated with fluticasone (n = 224) experienced greater mean increases in FEV1 (0.24 L vs 0.08 L; P < .001), morning PEF (30 L/min vs 6 L/min; P < .001), and evening PEF (23 L/min vs 5 L/min; P < .001) during the study than did those treated with zafirlukast (n = 216). Fluticasone-treated patients had significantly greater increases in the mean percentages of symptom-free days (22% vs 8%; P < .001), rescue-free days (23% vs 10%; P = .002), nights with uninterrupted sleep (<1% vs ~5%; P = .006), and fewer asthma exacerbations (1% vs 6%; P = .005). Fewer fluticasone-treated patients were withdrawn because of a lack of efficacy (2% vs 13%; P < .001).

Conclusions. Inhaled fluticasone was more effective than zafirlukast in maintaining or improving asthma control in patients with relatively stable asthma who were switched from low-dose inhaled corticosteroids.

Reviewer’s Comments. So the debate rages on. What’s different here is that the dose of fluticasone used was very low; only slightly greater than waving the inhaler over the patient’s head. On the other hand, we all see patients whose symptoms are extremely well-controlled with leukotriene receptor antagonists.

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LOW-DOSE INHALED CORTICOSTEROID THERAPY AND RISK OF EMERGENCY DEPARTMENT VISITS FOR ASTHMA
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