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To the Editor:

We thank Doctors Caballero-Fonseca and Sanchez-Borges for their interest in our abstract (October 2001 supplement).1 We reported on a large case series of patients who had experienced acute adrenal crisis due to inhaled steroids, nearly all due to fluticasone (>94%). Acute adrenal crisis was an extremely rare phenomenon before the introduction of fluticasone in the United Kingdom in 1994. We believe that our study highlighted important differences among the inhaled corticosteroid agents, and it specifically opposes the view that the most recently introduced inhaled steroid, fluticasone, has the best benefit/risk ratio.

However, we would like to emphasize that all the authors of our article are very enthusiastic prescribers of inhaled steroids as a first-line treatment for patients with all but the mildest forms of asthma. Inflammatory processes are absolutely fundamental to the pathogenesis of asthma, and inhaled steroids are by far the most effective drugs at reducing inflammation in asthma patients. They are also the most effective drugs at reducing the burden of asthma (ie, improving exercise tolerance, reducing days lost from school, preventing acute exacerbations, preventing hospital admissions, and decreasing the risk of death from asthma). In the vast majority of patients, the benefits greatly outweigh the risks. For example, in a long-term study (mean study duration, 9.92 years) of budesonide treatment (patient age range, 3 to 13 years) with a mean daily dose of 412µg/d (dose range, 110 to 887µg/d), there was no effect on final adult height and no evidence of any other significant side effects.2 It is this compelling and reassuring evidence of the long-term safety at least of this particular inhaled steroid in children.

We therefore believe in the early introduction of inhaled steroids in adequate dosages for the control of asthma, as is advised by all national and international guidelines, and that the safest amount of an inhaled steroid to administer to any child is the minimum amount required to control the asthma. Under these circumstances, the benefits of inhaled steroids greatly outweigh the morbidity and mortality associated with uncontrolled asthma. For example, it is important to remember that since the introduction of inhaled budesonide >20 years ago, there have been >10 billion patient-days of use of this drug, and reported serious side effects have been extremely rare. What other drug that we prescribe can claim such a safety record?

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References

Altered Swallowing Physiology and Aspiration in COPD

To the Editor:

In a recent issue of CHEST (February 2002), Mokhlesi et al1 speculated that the protective alterations in swallowing physiology (swallow maneuvers) may reduce the risk of aspiration in hyperinflated patients with COPD. As suggested by the authors, this is the first comprehensive study for assessment of swallowing function in stable hyperinflated patients with COPD. However the clinical implication may not yet be determined.2 Shaker and coworkers3 demonstrated that patients experiencing COPD exacerbations swallowed significantly more often by interrupting the inspiratory phase and resumed their respiration significantly more with inspiration. Further, Stein and coworkers4 reported that cricopharyngeal dysfunction was diagnosed in 17 of 25 COPD patients (68%) who experienced frequent exacerbations. The majority had dysphagia, and eight patients who underwent cricopharyngeal myotomy had significant improvement in swallowing and decrease in respiratory exacerbations. A higher prevalence of dysphagia in patients with COPD when compared with control subjects (17% vs 4%, respectively) has been also reported.5 These data indicate that the COPD patients are predisposed to oropharyngeal dysphagia. Thus, it is reasonable to speculate that the altered swallowing physiology may not be sufficient to reduce the chance of aspiration in hyperinflated patients with COPD.

We developed new methods for detection of swallowing disorders, ie, swallowing provocation test (SPT) and the simple swallowing provocation test (S-SPT).6–10 Using these tests, we found that more than 8 of 48 COPD patients (16.7%) showed an abnormal swallowing function. Our data support that the impaired swallowing function was frequently found in COPD patients. These methods, SPT and S-SPT, are very useful to differentiate the patients predisposed to aspiration in subjects with or without stroke.10 The S-SPT is more useful than the water swallowing test in differentiating patients predisposed to aspiration pneumonia, with high sensitivity and specificity. Clinically detectable aspiration is associated with increased morbidity. Silent aspiration remains a major difficulty. Considered together, COPD patients with swallowing disorders are at a risk of aspiration.

The occurrence of gastroesophageal reflux (GER) after bedtime is strongly associated with both asthma and respiratory symptoms.11 A variety of respiratory symptoms are associated with GER because the impaired swallowing reflex perturbs the inspiratory expiratory transition during deglutition in COPD patients. As a result, GER-related symptoms and aspiration may be increased in these patients. As suggested by the editorial of Mokhlesi et al.,2 it is true that clinical research for oropharyngeal dysfunction in COPD patients is strongly needed. Because most of the COPD patients are elderly, age-related changes of swallowing function may also affect the oropharyngeal function in COPD patients.12,13

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