

LETTERS TO THE EDITOR

Corticosteroids in Exacerbations of Chronic Obstructive Pulmonary Disease: Yes, but Less

To the editor: The use of corticosteroids in exacerbations of chronic obstructive pulmonary disease (COPD) has become widespread in clinical practice, yet an optimum dosage for these drugs has still not been defined. In their recent review, based on expert recommendations, Carrera et al¹ advocate a dosage for prednisolone of 1.5 to 2 mg/kg/d (105 to 140 mg in a patient weighing 70 kg). This contrasts with the results of 2 randomized studies, cited in their article, that proposed lower dosages.^{2,3}

Corticosteroids have marked side effects that should be taken into account in clinical practice.⁴ Of the acute side effects, reactive hyperglycemia, which tends to appear following moderate dosages even over short periods, often makes clinical management of the exacerbations more difficult. Among the chronic side effects, osteoporosis and vertebral fractures are particularly serious, particularly in elderly patients with lower baseline bone mass. In patients with severe COPD, protein catabolism is increased and bone mineral density reduced.⁵ Furthermore, long-term treatment with inhaled corticosteroids at high dosages has become commonplace with these patients, further increasing the risk of osteoporotic fractures.⁶ In this context, as the disease progresses exacerbations are more frequent and there is a tendency toward repeated use of corticosteroids, which have an accumulative effect on inducing lumbar osteoporosis.⁷

It is therefore worth revisiting the studies by Davies et al² (in patients admitted to hospital with a mean forced expiratory volume in the first second (FEV₁) of 25%, with no acidosis) and by Aaron et al³ (in outpatients with a mean FEV₁ of <40%). These patients showed a good clinical outcome in exacerbations of COPD with 30 mg and 40 mg of prednisone added daily to the bronchodilator and antibiotic treatment. A low dosage with consequent lower morbidity seems most suitable in this clinical situation.

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