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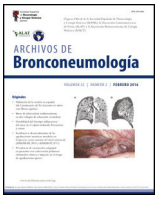

Letter to the Editor

Discrepancies between GEMA And GINA in the classification of inhaled corticosteroids☆

Discrepancias en la clasificación de los glucocorticoides inhalados entre GEMA y GINA

To the Editor,

Inhaled corticosteroids (ICS) are the most effective treatment for asthma and, as such, are recommended in treatment guidelines.[1,2] In both documents, the ICS dose is escalated depending on severity, while the different active ingredients are classified according to their equivalent potency in GEMA,[2] whereas GINA[1] refers to a table based on data from published studies that includes direct comparisons.

The 100 μg dose of fluticasone furoate is classified differently in these documents, which are otherwise in line with regard to other drugs and doses. In GINA,[1] this dose is listed as low, while in GEMA,[2] it is defined as medium. Despite the fact that fluticasone furoate is not marketed in Spain, and is only available in combination with vilanterol, this discrepancy needs clarification.

An ICS dose should ideally be classified in these tables on the basis of therapeutic potency and safety.

Traditionally, ICS have shown a linear relationship between efficacy and safety, so they could be compared in terms of dose-equivalence.[3] Fluticasone furoate can be considered a new-generation ICS, designed to achieve greater receptor affinity, in such a way that the linear relationship between efficacy and safety changes to a curve, demonstrated by the relationship between the therapeutic index (daily dose of ICS that would result in 20% cortisol suppression for each daily clinical dose of ICS) and ICS receptor occupancy, allowing it to achieve therapeutic effects similar to traditional therapies, but at a lower concentration.[3]

Safety can be estimated by calculating the dose that would result in 20% cortisol suppression. For this drug, according to pharmacokinetic/pharmacodynamic models, that dose would be 580 μg once daily,[3] more than 5 times the therapeutic dose. Another finding supporting safety is that the suppression of the hypothalamic-pituitary-adrenal axis caused by fluticasone furoate is no different to that of placebo.[4]

In conclusion, data on potency and safety allow us to predict that a dose of 100 μg fluticasone furoate will behave in the same way as a low dose of ICS, and the discrepancy in the GINA[1] and GEMA[2] classifications should be corrected by including in the latter a daily dose of 100 μg fluticasone furoate as a low dose ICS.

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