

Correspondence

Ketotifen in systemic mastocytosis—A response

To the Editor:

The recent letter by Dr. Ting (JACI 1990;85:818) suggests the superiority of ketotifen over conventional therapy of H₁ and H₂ antihistamines (hydroxyzine and ranitidine), as well as doxepin, in an adult patient with systemic mastocytosis with clinical relief of multiple symptoms (cutaneous, gastrointestinal, and neuropsychiatric) and a lowered 24-hour urine histamine. In contrast, our study of ketotifen versus hydroxyzine in children with pediatric-onset mastocytosis demonstrated no superior effect of ketotifen compared to hydroxyzine in either reduction of clinical symptom scores of pruritus, flushing, and gastrointestinal symptoms or lowering of either plasma or 24-hour urine histamine levels.¹ Dr. Ting also questions the optimal dose of ketotifen for the treatment of mastocytosis, since the dose of ketotifen his adult patient received was 8 mg a day, whereas the children in our study received only 2 mg a day.

In reply to his observation and suggestion, I emphasize the following points: (1) The total daily dose used in an adult male with an average weight of 70 kg of 8 mg, approximately 0.1 mg/kg, was equivalent or less than the average total daily dose in our pediatric population of 0.1 to 0.2 mg/kg. (2) Our study was a double-blinded, crossover trial. (3) The observation of a decreased 24-hour urine histamine may reflect the previously documented normal fluctuations in histamine levels in patients with adult-onset mastocytosis.²

Although Dr. Ting's study appears to be encouraging, we agree with Dr. Ting that only carefully designed clinical studies of ketotifen in adult-onset mastocytosis will demonstrate superior efficacy of ketotifen when it is compared to standard antihistamine treatment in patients with adult-onset mastocytosis. These studies should use a double-blind, placebo-controlled clinical trial design so that the normal fluctuations in symptoms and histamine levels are not improperly attributed to the therapy in question.

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The use of reservoir devices for the simultaneous delivery of two metered-dose inhalers

To the Editor:

The recent study by Clark et al.¹ has demonstrated that major losses of therapeutically useful aerosolized medication, that is, drug in particles <6.5 µm, will occur if multiple puffs are introduced into either of the two widely available metered-dose inhaler (MDI) accessory devices before aerosol inhalation, confirming the instructions enclosed with the devices that MDI aerosols should be inhaled one puff at a time.

Unfortunately, the study protocol does not allow a direct comparison of the relative "efficiency" of the two aerosol accessory devices because, although aerosol recovery after one puff of medication introduced into the InspirEase (Schering Corp., Kenilworth, N.J.) was evaluated, the Aerochamber (Monaghan Medical Corp., Plattsburgh, N.Y.) was studied with no less than two puffs. One puff through the InspirEase increased this value, whereas two puffs through the Aerochamber reduced it. The authors then used these results as the basis for comparison with four puffs through either device, concluding that the fine particle respirable dose was reduced by a similar amount for each device. It might be concluded that, had one puff been introduced into the Aerochamber, the efficiency measured would have been almost identical to that of the InspirEase.

This hypothesis is certainly borne out by the results of clinical studies when direct comparisons were made in adults and children.^{2,3}

The study by Clark et al.¹ strongly supports the current recommendations for MDI accessory devices, namely, that aerosols be inhaled from the MDIs one puff at a time.

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