

Correspondence

Prevalence of cross-sensitivity with acetaminophen and other nonsteroidal antiinflammatory drugs in asthmatic patients

To the Editor:

We have read the article titled "Prevalence of cross-sensitivity with acetaminophen in aspirin-sensitive asthmatic subjects" (Settipane et al. *J Allergy Clin Immunol* 1996;95:480-5) with great interest. In relation to this article, we would like to give information about our prospective clinical study going on since 1991, the preliminary data of which were published before.¹ Of the 98 asthmatic patients (25 men and 73 women) who were sensitive to aspirin, metamizol, acetaminophen, and other nonsteroidal antiinflammatory drugs (NSAIDs), 71 of them had classical Samter's syndrome. Twenty of the patients had dermatographism, and six had chronic urticaria. Their mean age was 40.5 ± 10.7 years (range, 17 to 68 years), and they had had analgesic intolerance for 8.1 ± 9.1 years (range, 0.2 to 47 years). Analgesic intolerance was diagnosed by history in half of them and by results of oral provocation tests in the other half. Acetaminophen test was performed as described before.² Sensitivity was detected to aspirin in 60 of the patients, to metamizol in 52, to acetaminophen in 17, and to other NSAIDs in 40. Nineteen patients had only aspirin sensitivity, whereas 10 had metamizol sensitivity, three had acetaminophen sensitivity, and 13 had other NSAID sensitivities. Concomitant acetaminophen sensitivity was present in nine patients (15%) who were also aspirin-sensitive and in eight patients each in the metamizol-sensitive and other NSAID-sensitive groups (15.4% and 20%, respectively). The results of skin prick tests and/or RAST showed an atopy rate of 43.5%, and the geometric mean of the total IgE was 107 kU/L. Only three of the acetaminophen-sensitive patients had anaphylactoid reactions after taking this drug; others had relatively milder reactions.

These data demonstrate that acetaminophen sensitivity is not rare and that cross-sensitivity may occur with other analgesics in asthmatic patients.

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Reply

To the Editor:

Dr. Kalyoncu reports that nine of 50 (15%) aspirin-sensitive asthmatic patients were sensitive to acetaminophen when challenged with doses up to 750 mg (methods per Leung et al.¹). We found that eight of 34 (24%) aspirin-sensitive asthmatic patients had bronchospastic reactions to acetaminophen when challenged in single-blind fashion with doses of 1000 mg (*J Allergy Clin Immunol* 1995;96:480-5). This frequency increased to 32% if the challenge dose was 1500 mg and further increased to 34% (17 of 50) if nasooocular reactions were included as aspirin and acetaminophen reactions. Although Dr. Kalyoncu's letter does not indicate whether his acetaminophen challenges were blinded or define the types of acetaminophen reactions that occurred, there are identifiable reasons that, in comparison to our data, he has found a lower frequency of acetaminophen cross-sensitivity in aspirin-sensitive asthmatic patients. First, his maximum acetaminophen challenge dose was only 750 mg; acetaminophen sensitivity is dose-responsive, as our data indicate. Second, Dr. Kalyoncu did not confirm aspirin sensitivity by direct oral challenge, and therefore some subjects may not have been truly aspirin-sensitive.² Furthermore, it would have been important to have characterized the types of aspirin sensitivity in Dr. Kalyoncu's study population. Certainly, patients with the urticarial type of aspirin sensitivity would be less likely to demonstrate acetaminophen cross-reactivity than would patients with the bronchospastic type of aspirin sensitivity, who made up our study population.

Dr. Kalyoncu additionally presents data indicating that acetaminophen cross-reacts with nonsteroidal antiinflammatory drugs other than aspirin. This is an important point and should be expected because all nonsteroidal antiinflammatory drugs that inhibit cyclooxygenase cross-react with aspirin in aspirin-sensitive asthmatic patients.³

We agree with Dr. Kalyoncu's conclusion that acetaminophen sensitivity is not rare and that cross-sensitivity may occur with aspirin and other nonsteroidal antiinflammatory drugs.

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