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Imipenem in Patients with Immediate Hypersensitivity to Penicillins

TO THE EDITOR: It is considered potentially harmful to administer imipenem–cilastatin to patients with IgE-mediated hypersensitivity to penicillins because of a 47.4 percent rate of cross-reactivity (9 of 19 subjects) found in a single study on the basis of positive skin tests involving imipenem reagents.

Between 1997 and 2005, we studied 112 consecutive patients with such hypersensitivity, diagnosed as previously described, in order to assess the cross-reactivity with imipenem–cilastatin and to evaluate the allergic responses to imipenem–cilastatin in patients who had negative skin tests. Our patients had had a total of 143 immediate reactions to penicillins. All patients had positive skin tests for at least one of the penicillin reagents.

In addition, we observed no glucan reactivity in five batches of piperacillin–tazobactam (23±26 pg per gram). These results are highly suggestive of cross-reactivity of the Fungitell assay with amoxicillin–clavulanic acid. Physicians should be aware of the possibility of false positive 1,3-β-D-glucan results in patients treated with this antibacterial agent. The presence of two different fungal components in the antibiotic provides strong evidence of a fungal origin of the cross-reactive components in the drugs. Given the difficulties encountered in the diagnosis of invasive fungal disease, it would be desirable to eliminate the fungal material from antibiotic agents.