Insulin allergy: clinical manifestations and management strategies

Lucie Heinzerling, K Raile, H Rochlitz, T Zuberbier & M Worm

Insulin allergy in patients with diabetes mellitus on insulin treatment is a rare condition. It is suspected upon noticing immediate symptoms following insulin injections. The immediate vital implications for the patient call for prompt diagnosis and management of insulin allergy. We review current knowledge and procedures based on four diabetic patients who presented in our clinic. Insulin allergy was suspected as they showed immediate symptoms after insulin injection (urticaria, rash, angioedema, hypotension, dyspnea). A detailed allergologic work-up was performed and adequate therapy was initiated. In three of the four patients, a specific immunotherapy was started whereas in one patient a switch to oral antidiabetics was possible and consequently initiated. By standard prick testing and measurement of specific IgE antibodies, a type 1 IgE-mediated allergy was confirmed. After initiation of insulin immunotherapy, the symptoms completely resolved in two out three of patients and significantly improved in the third patient. The fourth patient was successfully switched to oral antidiabetics. Insulin allergy is a rare but severe condition that calls for immediate allergological work-up. It can be managed well in close cooperation between the diabetologist and the allergologist. Specific immunotherapy is efficient and should be considered.

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