

00282 Adverse Drug Reaction Following Ingestion of a Lysozyme-containing Mucolytic in a Child With Egg Allergy: A Case Report

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Aims: Background

As the prevalence of food allergy rises, so does the risk of hypersensitivity to food additives in drugs and health products. Lysozyme-containing products are commonly used in upper respiratory tract infections. In this report, we describe a case of adverse drug reaction following ingestion of Leftose[®], a lysozyme-containing product, in a child with egg allergy.

Methodology: Case presentation

We report the case of a 3 year old Chinese girl with a background of food allergy to milk and egg. She developed generalized urticaria within 30 minutes of Leftose[®] ingestion, which was prescribed by the family doctor for an upper respiratory tract infection. There were no systemic complaints. This was her first exposure to Leftose[®]. Subsequent prick to prick test to the Leftose[®] syrup confirmed immediate hypersensitivity to lysozyme (wheal size 14mm). A skin prick test to egg white extract was still positive, with a wheal size of 9mm. Lysozyme (acetyl-muramidase) is an enzyme with bactericidal activity with purported expectorant and mucolytic benefits; though review of recent evidence failed to show its efficacy compared to a placebo¹. Lysozyme is usually derived from hen's egg white. Eggs contain 3% lysozyme which has been characterized as an allergen (Gal d 4). Up to 32% of individuals with egg allergy are sensitized to lysozyme. Drugs containing lysozyme have been known to cause allergic reactions of urticarial, angioedema and even anaphylaxis².

Result: Physicians should exercise caution when prescribing lysozyme-containing products as they may potentially cause life-threatening reactions in patients with egg allergy.

Conclusion: Reference

1. HSA updates on the phasing-out of lysozyme containing products as therapeutic products. Health Sciences Authority. 2017.
2. Audicana Berasategui MT, Barasona Villarejo MJ, Corominas Sánchez M, et al. Potential hypersensitivity due to the food or food additive content of medicinal products in Spain. *J Investig Allergol Clin Immunol*. 2011;21:496-506.