

Chronic urticaria due to milk

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Abstract A patient of urticaria due to milk and milk product is being reported. She was having urticaria since 8 months. The urticaria improves with antihistamine only. She was off the urticaria when she was put on total fast for 48 hour. Provocation test after 10th day with milk, she developed urticaria 8 hours after taking milk.

Key words

Urticaria, milk, milk products, provocation test.

Introduction

The causes of urticaria in majority of the cases remain unknown. Urinary tract infection^{1,2} inhalant allergens^{3,4} and drugs⁵ have been found in some cases. Food like meat, fish, eggs, milk, wheat, rice, pulses, nuts, potato or anything which contain sufficient amount of protein can occasionally cause urticarial.⁶ Urticaria due to milk, though has been reported⁷, is not very frequent. We are reporting a case of urticaria in which urticaria subsided every time the patient stop milk and milk products.

Case report

A- 36- year old lady presented with recurrent urticaria almost every day since 8 months duration. The urticaria used to disappear with antihistamine and reappears the moment antihistamine was stopped. She was put on total fast for 48 hours allowing her to take only water, salt and sugar. The lesions of urticaria decrease by second day and disappeared by the end of 48 hours. Provocation test was started by giving one item of the food every day. On 10th day she

took milk with sugar throughout day and night. She started swelling on her face and urticaria on her arm after 8 hours with itching. She was asked to stop milk which led to clearance of urticaria in 2-3 days.

She continued other items of food with no recurrence of urticaria. On 17th day she again took milk at 9:00pm and developed urticaria on face and abdomen within 8 hours. Two days after clearance of urticaria, she took paneer and curd. After 10 hours she developed urticaria which clears in 8 hours.

Discussion

Repeated occurrence of urticaria after taking milk or milk product confirmed the urticaria due to milk.

Cow's milk is the usual cause of urticaria but milk from sheep, goats, buffalo and other mammals can also cause urticaria. Milk allergy causes swelling of the skin, sometimes of the eyes and lips. Those who are allergic to milk have a reaction to the proteins, which in cow's milk is found as a liquid portion. Adults can develop an allergy to milk in their 30s and 40s. A food allergy is identified as an abnormal response to immune system (most notably proteins) with in a food in milk. It was

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previously thought that milk allergies occurred only in infants, and the urticaria subsided prior to adulthood. Unfortunately, for many of us this isn't so. Milk allergy, is an abnormal response to body's immune system to milk.⁸

Avoidance is the primary treatment for milk allergy. There are two main proteins in cow's milk that can cause an allergic reaction. **Casein** is found in the solid part (curd) of milk. **Whey** of milk that remains after milk curdles. Most people who react to cow's milk also react to sheep's, goat's and buffalo's milk. **Hypoallergenic formulas** are produced by using enzymes to break down (hydrolyze) milk proteins, such as casein or whey. For milk allergy, non-IgE-mediated responses are more common than IgE-mediated. The role of lymphocytes in patients with milk-induced urticaria is not clear. T-lymphocyte plays a role in food-induced urticaria. Cutaneous Lymphocytes Antigen expressing CLA are selectively activated in patients with milk-induced urticaria. In majority of cases an etiology of urticaria remains idiopathic. Autoimmune causes for chronic urticaria have been found to play an important role. Prostaglandins, leukotrienes (LTs), and cytokines such as IL 31 seem to prolong the inflammatory process.⁹

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