

## CHRONIC URTICARIA DUE TO MILK

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### Sir

The causes of urticaria in majority of the cases remain unknown. Urinary tract infection<sup>1,2</sup> inhalant allergens<sup>3,4</sup> and drugs<sup>5</sup> 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 urticaria<sup>6</sup>. Urticaria due to milk, though has been reported<sup>7</sup>, is not very frequent. We are reporting a case of urticaria in which urticaria subsided every time the patient stop milk and milk products.

A- 36- year old lady presented with recurrent urticaria almost every day since<sup>8</sup> 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 ask to stop milk which leads 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 9pm and developed urticaria on face and abdomen within 8 hours. Two days morning after clearance of urticaria, she took paneer and curd. After 10 hours she developed urticaria which clears in 8 hours.

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 cause 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 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<sup>8</sup>.

Avoidance is the primary treatment for milk allergy. There are

two main proteins in cow's milk that can cause an allergic reaction. Casein, 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. Lymphocytes expressing CLA are selectively activated in patients with milk-induced urticaria. In majority of cases 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<sup>9</sup>.

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### References

1. Pasricha JS, Gupta Ramji. Urticaria and urinary tract infection. A case report. Indian J Dermatol Venereol Leprol. 1981; 47:277-8.
2. Gupta Ramji, Gupta Sarthak, Khera Vikas. Urticaria / angioedema due to urinary tract infection. Indian J Dermatol. 2006;50:S53-4
3. Bourrain JL. Airborne allergens induced urticaria. Ann Dermatol Venereol. 2001; 128:1139-41.
4. Gupta Ramji, Gupta Sarthak. Urticaria due to inhalant allergens. Indian J Dermatol Venereol Leprol. 2003; 69:429.
5. Shaath J.S, Patal V.K, Rajpara A.N, Fraga G.R, Aires D.J, Drug induced urticaria. Cutaneous Drug Eruption. 2017;55-63.
6. Henz BM, Zuberbier T. Most chronic urticaria is food dependent and not idiopathic. Exp Dermatol. 1998; 7:139-42.
7. Drouet M, Sabbah A, Hassoun S, Le Sellin J, Bonneau J.C, Gay G. Chronic urticaria caused by cow's milk allergy: immediate or delayed allergy? (Apropos of a case). Allerg Immunol (paris). 1999; 31:79-81.
8. Deacock S J. An approach to the patient with urticaria. Clin Exp Immunol. 2008; 153: 151-161.
9. Beyer K, Castro R, Feidel C, Sampson HA. Milk-induced urticaria is associated with the expansion of T-cells expressing cutaneous lymphocyte antigen. Allergy Clin Immunol. 2002; 109: 688-93.

