

# Acute Urticaria due to Cow Milk Protein - A Case Report

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**Abstract:** Urticaria refers to as “hives” is a kind of skin rash notable for pale, red, raised, itchy bumps or sometimes red papules. These are different types of allergic triggers that causes urticaria. Cow milk related urticaria is mainly IgE mediated allergic reaction. 1 yr old boy presented with red, elevated, itchy skin rashes over the back & buttock. His mother gave an history of consumption of cow’s milk about 1 hour back on that day. The baby was given Antihistaminic syrup (hydroxyzine) and after 2 - 3hr itching, wheals & rashes tends to reduce. Most probably this is a case of acute urticaria due to cow milk protein.

**Keyword:** Urticaria, Cow milk protein

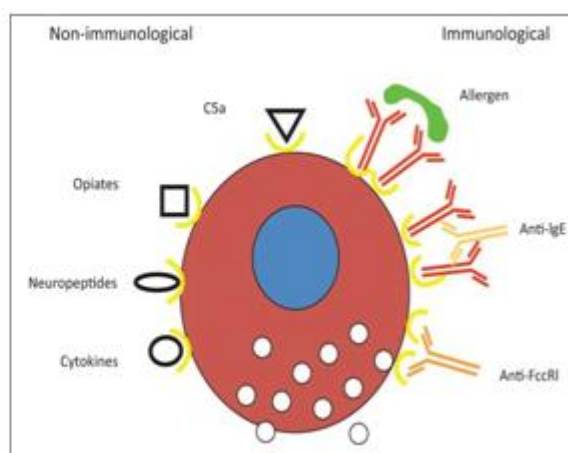
## 1. Introduction

Urticaria is a common problem in adult as well as in neonates & children. It commonly refers to as “hives” is a kind of skin rash notable for pale, red, raised, itchy bumps or sometimes red papules. These are different types of allergic triggers that causes urticaria, food is one of the most common agents. Food related urticaria is mainly IgE mediated allergic reaction.

## 2. Case Report

An 1 yr old boy presented with red, elevated, itchy, evanescent rashes over trunk and face after taking cow milk about 1 hour back. The child has similar past history of allergic reaction after consumption of cow milk which resolves spontaneously. The child attended dermatology OPD where it is diagnosed clinically as a case of acute urticaria probably due to consumption of Cow’s milk. He was given Antihistaminic syrup. Itching, wheals & rashes tends to reduce after 2 - 3hr.

Cow milk induced urticarial rash



## 3. Discussion

Immunological and non - immunological insult causing transient vasodilatation due to release of histamine (main) and other mast cell mediator PGD<sub>2</sub> & PAF. TNF -  $\alpha$  upregulates adhesion molecules with recruitment of acute inflammatory cells, so there is increased level of IL - 8 & IL - 10 are found in acute urticaria whereas IL - 6 & IL - 8 are

found in induced urticaria. This is mainly due to cow milk protein allergy but there may be other causes like vaccines or infection which can cause same type of reaction.

## 4. Conclusion

Cow milk protein induced urticaria are common even in child age group and it should be taken care of. It can cause

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severe hypersensitivity reaction which can be life threatening. Such food should be avoided and anti-histaminics should be given as early as possible.

## **References**

- [1] Maurer M, Weller K, Bindslev - Jensen C, et al. Unmet clinical needs in chronic spontaneous urticaria. A GA<sup>2</sup> LEN task force report. *Allergy* 2011; 66: 317–30  
10.1034/j.1399 - 3038.2001.121407.
- [2] Zuberbier T, Asero R, Bindslev - Jensen C, et al. EAACI/GA (2) LEN/EDF/WAO guideline: definition, classification and diagnosis of urticaria. *Allergy* 2009; 64: 1417–26