

Case Report

Chronic urticaria in a two year old child: a diagnostic dilemma

Jayasurya Suresh^{1*}, Nidheesh Chandran R.²

¹Department of Paediatrics, Providence Hospital, Alappuzha, Kerala, India

²Department of General Medicine, Mysore Medical College, Karnataka, India

Received: 30 June 2020

Accepted: 31 July 2020

***Correspondence:**

Dr. Jayasurya Suresh,

E-mail: drjayasuryasuresh@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

A 2 year old child presented with history of recurrent urticaria for 2 months. The cause was initially idiopathic. On close questioning about diet and observation it was found that mother started using a coriander based masala powder 2 months back and it was found that the child was allergic to coriander. Chronic urticaria should be dealt with extreme caution and careful elicitation of history for the offending agent should be taken in a case of urticaria which poses as a diagnostic dilemma.

Keywords: Chronic urticaria, Childhood urticaria, Coriander allergy

INTRODUCTION

Urticaria is a disease of mast cell degranulation which presents with wheals, itching, heaves, angioedema etc.¹ The pathogenesis of urticaria is incompletely understood.¹ Urticaria is classified as acute and chronic urticaria based on the duration of presentation.¹ Chronic urticaria is defined as lasting longer than 6 weeks.² Causes of chronic urticaria are physical insults, allergens, hereditary urticaria, autoimmune causes, and idiopathic causes.³ Idiopathic causes of chronic urticaria often cause a diagnostic dilemma. 80- 90% of chronic urticaria cases are idiopathic.⁴ Basophils and mast cells are the main cells leading to clinical manifestations.³ These cells secrete inflammatory mediators like histamine, serotonin, leukotrienes, prostaglandins, cytokines, chemokines, and other pro-inflammatory mediators.³ This secretion leads to dilatation of blood vessels, exudation of tissue fluid, and increased vascular permeability.² The main pharmacologic treatment modalities for chronic idiopathic urticaria are H1 antihistamines, H2 antihistamines, leukotriene antagonists, and corticosteroids.

CASE REPORT

A two year old male child presented with complaints of recurrent urticaria for two months. Child had almost daily symptoms of urticaria with 2 episodes of angioedema in two months which required hospitalisation and intravenous adrenaline and steroids. The condition was causing much mental trauma to the parents as the cause of urticaria could not be found inspite of repeated hospital visits. There was no history of any drug allergies, worm infestation, food allergy, pollen allergy or family history of allergies. Investigations revealed elevated eosinophil counts and IgE levels. It was observed that the child did not have any symptoms during hospital stay but developed symptoms solely at home. Thus it was concluded that the allergen was at home. On close questioning the mother whether any diet changes was made in past two months at home, it was found that mother started using a coriander based masala powder 2 months back. Mother was advised to stop using the newly introduced coriander based masala powder and the child was discharged once the symptoms settled. The child was asked to come for follow up after one week. There were no further episodes of urticaria and hence it was concluded that the child was allergic to coriander. The

diagnosis was further confirmed after doing a patch test and food allergy test with the allergen.

DISCUSSION

There have been multiple studies in adults which have observed coriander as an allergen.⁵⁻⁹ Chronic urticaria in children are often confusing when it becomes chronic as majority of causes are idiopathic.⁴

Chronic urticaria can raise parental concerns and unnecessary fear. It can often be a diagnostic dilemma when the condition happens in small children. Careful history elicitation and follow up is required in cases of chronic urticaria in children. urticarial episodes can lead to life threatening angioedema.⁴ Hence parental education about the causes of urticaria, treatment and precautions to be followed should be explained. There is no need of unnecessary investigations to find out the cause of chronic urticaria

CONCLUSION

A thorough history elicitation and avoidance of suspected allergen should be the key of treatment in a case of chronic urticaria in a child. The underlying allergen can be a masquerader and hence careful history rewind is a must to find out the hidden culprits. Urticaria in infants and small children usually lead to a diagnostic challenge for the treating paediatrician or dermatologist. The allergen might be right in front of the eyes but can be a rare entity like this case. So trial and error with a careful history elicitation and prevention of complications like anaphylaxis or anaphylactic shock with necessary medications is the key to the treatment of childhood urticaria.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

REFERENCES

1. Radonjic-Hoesli S, Hofmeier KS, Micaletto S, Schmid-Grendelmeier P, Bircher A, Simon D. Urticaria and angioedema: an update on classification and pathogenesis. Clin Rev Allergy Immunol. 2018;54(1):88-101.
2. Altman K, Chang C. Pathogenic intracellular and autoimmune mechanisms in urticaria and angioedema. Clin Rev Allergy Immunol. 2013;45(1):47-62.
3. Min TK, Saini SS. Emerging therapies in chronic spontaneous urticaria. Allergy Asthma Immunol Res. 2019;11(4):470-81.
4. Schaefer P. Acute and chronic urticaria: evaluation and treatment. Am Fam Physician. 2017;95(11):717-24.
5. Brussino L, Nicola S, Giorgis V, Rolla G. Beer anaphylaxis due to coriander as hidden allergen. BMJ Case Rep. 2018;2018:bcr2018-225562.
6. Ebo DG, Bridts CH, Mertens MH, Stevens WJ. Coriander anaphylaxis in a spice grinder with undetected occupational allergy. Acta Clin Belg. 2006;61(3):152-6.
7. Suhonen R, Keskinen H, Björkstén F, Vaheri E, Zitting A. Allergy to coriander. A case report. Allergy. 1979;34(5):327-30.
8. Moneret-Vautrin DA, Morisset M, Lemerdy P, Croizier A, Kanny G. Food allergy and IgE sensitization caused by spices: CICBAA data (based on 589 cases of food allergy). Allerg Immunol (Paris). 2002;34(4):135-40.
9. Manzanedo L, Blanco J, Fuentes M, Caballero ML, Moneo I. Anaphylactic reaction in a patient sensitized to coriander seed. Allergy. 2004;59(3):362-3.

Cite this article as: Suresh J, Chandran NR. Chronic urticaria in a two year old child: a diagnostic dilemma. Int J Contemp Pediatr 2020;7:1926-7.