

ABSTRACT SUBMISSION FORM

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SEX + GENDER

Exploring the role of sex and gender on health research



CHR D 2020: Abstract Submission Form

Submitter Name

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Title

Is atopic dermatitis associated with delayed resolution of egg allergy in infants?

Background

Atopic dermatitis affects 10-20% of children; 1% of children have egg allergy and 50% of egg allergy is outgrown. Early, persistent, and severe atopic dermatitis has been associated with developing egg allergy.

Objective

We hypothesize that infants with egg allergy are less likely to outgrow their allergy if they have moderate-to-severe atopic dermatitis.

Methods

We reviewed charts of all infants with egg allergy referred to Pediatric Allergy Clinic in the first year of life and evaluated from 2013-2017. We collected data regarding egg allergy development and resolution, atopic dermatitis and covariables. We used multivariable logistic regression to evaluate the association between egg allergy resolution and atopic dermatitis presence and severity.

Results

Among 83 children with egg allergy, median age of diagnosis was 8.4 months (range 3.1-42 months), 56.6% were male, 57.8% outgrew egg allergy, 94.0% developed well-baked egg tolerance, 80.7% had atopic dermatitis (11.0% severe, 24.4% moderate and 45.1% mild), 67.0% had other food allergies, 25.6% had asthma and 62.7% had parental allergic conditions. Compared to those with no-or-mild atopic dermatitis, children with moderate-to-severe atopic dermatitis had similar odds of outgrowing egg allergy (adjusted odds ratio (aOR) 0.45, 95% CI 0.17-1.20, $p=0.1$) and tolerating well-baked egg (aOR 0.16, 95% CI 0.015-1.59, $p=0.8$). After adjusting for biological sex and parental history of atopic dermatitis, children with atopic dermatitis of any severity were less likely to outgrow their egg allergy (aOR 0.14, 95% CI 0.03-0.72, $p=0.02$).

Conclusion

We could not determine an association between atopic dermatitis severity and developing tolerance to egg or well-baked egg. Children without atopic dermatitis were more likely to outgrow their egg allergy than those with atopic dermatitis of any severity. The impaired skin barrier of children with atopic dermatitis may decrease the odds of outgrowing egg allergy by maintaining ongoing epicutaneous exposure.

Theme:

Clinical

Do you have a table/figure to upload?

No

Are you willing to participate in Goodbear's Den?

Yes

Presenter Status:

Residents

What was your role in the project?

Collect, and analyze data. Statistical analysis. Abstract preparation.

Authors

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